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THE ECONOMIC FOUNDATIONS OF RECONSTRUCTION

BY

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TO

"N. J."

COMRADE OF

MY ECONOMIC THOUGHT.

PREFACE

In the autumn of 1918 I was invited by the Committee of the Political and Economic Circle of the National Liberal Club to deliver a short course of lectures in the Lincolnshire Hall of the Club on the economics of those problems of reconstruction which it was even then obvious must arise on the conclusion of peace. At that time the Armistice had not been arranged, and the realization of peace was still in the problematic future. And the majority of the lectures had actually been delivered before the cessation of hostilities. Nevertheless, the change in the world-position has, to the best of my judgment, called for no alteration in the exposition of the economic principles which in those lectures I endeavoured to state, and which in the following pages are reissued in more permanent form. And I send those pages forth in the hope that some of those whose trust is, and whose task in any measure may be, in the restoration of our England to prosperity and to happiness, and some, perchance, bravely striving against heavy odds that the feet of the people be not led astray, may find therein a kindly message of sympathy, a strengthening word of help.

A. M.

Hampstead,
April 1919.

CONTENTS

LECTURE I

PAGE

INTRODUCTORY ANALYSIS. PAYMENT BY PRODUCTION . 1

LECTURE II

ENRICHMENT BY EXCHANGE. INTERNATIONAL TRADE . 28

LECTURE III

FOREIGN EXCHANGES 53

LECTURE IV

THE GENERAL QUESTION OF FREE TRADE . . . 93

LECTURE V

RECENT ATTACKS ON FREE TRADE 123

LECTURE VI

ECONOMICS OF A LEAGUE OF NATIONS. FINANCE AFTER THE WAR 154

LECTURE VII

INDUSTRY AFTER THE WAR 179

LECTURE VIII

INDUSTRY AFTER THE WAR (*continued*). OUR LIBERTIES . 209

INDEX 223

The Economic Foundations of Reconstruction

LECTURE I

INTRODUCTORY ANALYSIS. PAYMENT BY PRODUCTION

I PROPOSE in these lectures to speak of so much of Economic Science as is necessary to the understanding of the problems which the students of that science can foresee as almost certain to arise when the clash of arms is over, and man turns again to the ways of peace.

But first, can the economist, as such, claim to have any *locus standi* in the matter? Some would tell me that war in all its aspects—the entry into war, the conduct of a war, the passage from war back to peace, and the measures to be taken for the reconstitution of a peaceful society—are matter *par excellence* for the handling of the practical man; of that practical man of whom it has been wisely said that he differs from the theoretical man in being obsessed with a vastly greater number of theories than the theoretical

man, with a vastly greater proportion of them wrong. Others, with Mr. Hughes as their Antipodean leader, declare that the day of economic science, if ever economic science had a day, is done; and that economists are mere doctrinaires, visionaries, and agents of Germany, and implore us to accept nothing made in Germany but her thousand-times exploded economic errors. These last we are to welcome with open arms and import wholesale and duty-free; on the ground, apparently, that the only economists who are not agents of Germany are the German economists. In which convictions these folk hold themselves as now at last privileged to dance a corroboree over the grave of the Law of Comparative Cost.

But Nature's teaching, which it is the function of Science to report and interpret for the service of man, is stern and implacable. It is not a word and a blow—not even with the blow first. It is a blow in silence with no word at all, and we are left to find out why we are struck. We cannot even disobey; we can only disregard—and take the consequences. The man who walks out of a fifth-floor window, does not break the law of gravitation; he merely disregards it, and the consequences of his disregard await him on the pavement below. Hence the responsibility of our citizenship. We have to decide upon our course; and we do well to provide that our service be a reasonable service. And as I understand it, I am here to-night, in accordance with the invitation with which your Committee has honoured me, to start upon the task of explaining some

of those truths of economic science which are among the things that no War-lord can slay, nor any Armageddon overthrow. The Kaiser may ravage lands in the ferocity of his victorious advance, and the yet more savage ferocity of his defeated retirement; he may sink liners loaded with civilian passengers, and send cargoes of helpless women and children to the bottom of the sea; he may break and defy every law of morals and of decency that righteousness and honour have imposed upon mankind: but his encircling or encircled strategy is limited by the fact that any two sides of a triangle are together greater than the third; and his people, confronted with the great economic law of Diminishing Return, cry vainly to him for potatoes and are not fed. Therefore I propose to ask you now to trace with me some of those wondrous chains of economic cause and effect whose power has moulded the destinies of man from the days of Ancient Stone down to the building that has been, and the rebuilding that yet shall be, of Reims Cathedral; and once more to consider those mighty laws of human society in whose presence the decrees of kings are powerless, and against which the nations shall all in vain so furiously rage together. Considering them I shall, it is true, so far as my limits of time permit, remembering the existence of a state of war, bring them into *rapport* with that condition of things, all unhappy as it is. But this will chiefly be to show, if I may succeed in showing, that amidst mere passing events these great laws stand like rocks amid the spray;—laws

of the world in which we live. And of those laws the saying still rings true—

> When you and I beyond the veil are passed,
> Oh, but the long, long while the world shall last;
> Which of our coming and departure heeds
> As the sea's self should heed a pebble cast.

The greatest war of all time is still upon us, and no man knows when that awful cloud shall drift away. We are in it, and we have still to finish it—outright and downright, and for ever, if there be wisdom and manhood left to us. But the magnitude of the task staggers our imagination. Of its frightful burden of sorrow and of suffering there is no human measure—the heart of the nation knoweth its own bitterness. On that side I will abstain, as I have throughout abstained, from the mockery of vain words. But the mere dead weight of our expenditure we can estimate, though even this in terms which pass beyond the powers of actual conception. Professor Scott, the learned occupant of the Adam Smith Chair of Economics in the University of Glasgow, estimates that the bill of our total expenses for 1918–19 will amount to £3,000 millions. That is at the rate of about £95 per second of time, night and day. It may be worth while to analyse this immense sum with a view to aiding the imagination to grasp the magnitude of it. Such analysis will stand thus:—

Analysis of Three Thousand Millions of Pounds Sterling.

The legal weight of an English golden sovereign is 123·27447 grains Troy. Hence we have—

£1 = 123·27447 gr.
£1m = 123274470 gr.
£3,000m = 369823410000 gr.
= 52831915 lb. Av.
= 471713 cwt.
= 23585 tons.
11,792 coal carts, each 15 ft. of road = 33½ miles, at 4 miles an hour, 9 hours to pass.

A weight of 23,585 tons of standard gold! Taking the load of an ordinary horse coal-cart at 2 tons, we should need 11,792 such carts to carry this amount of gold. And if each cart wanted, say, 15 feet of road, this would mean a procession of wagons 33½ miles long, and, at the rate of 4 miles an hour, taking something like nine hours to pass a given point.

Or again, analysing by time:—£95 per second in round figures. If you missed your train this morning by half a minute, the country in that half-minute spent £2,850. While your breakfast egg was taking three minutes to boil, the national expenditure was £17,100. An average speaker speaks in public about 120 words a minute—£47 10s. gone for every word he speaks. While, if you have an hour's patience to last my lecture out, the nation will be poorer at the end than at the beginning of it by no less than—taking the full figures, £342,465.

Now the total amount of gold in the world, as far as at present known, is estimated as sufficient to make 2,000 millions of English sovereigns. It

is important to remember that this is only about two-thirds of the English expenditure for one year; important as showing how utterly impossible it is that war should be paid for in money.

This analysis shows how out of the question it is that such an expenditure should be collected in money, in the strict sense of the word money. It is by means of our products, and our products only, that such claims upon us can be met. And we are thus brought face to face with the enormous complexity of our modern civilization. Even in times of peace this complexity of organization to minister to our wants becomes almost bewildering when we try to obtain some coherent idea of it. Consider the contents of a single street of London shops in time of peace, and we shall find that for the supplies of this one district the world has been ransacked from China to Peru. Whilst on the complexity of our civilization in time of war it is hardly necessary to dilate our Income Tax is convincing upon the point. But here perhaps more than anywhere else we have brought home to us the marvellous character of the changes wrought in the course of what Dr. Alfred Russel Wallace has called "the wonderful century." The harnessed lightning now bears the message beneath the sea, and transport ships bring thousands of civilized soldiers, furnished forth with all the resources of science, steam-driven in the teeth of wind and tide, from our Colonies, East, West, North, and South, including those Antipodes which the Fathers declared to be impossible, unscriptural, and beyond the latitude of salvation.

Colonies, be it ever remembered, once struggling against a sense of our oppression, now, thanks to the economic teaching of Adam Smith, our ever-present help and stay in the hour of our trial and our stress. It is a war of munitions; and the sun sets not on the workshops and laboratories where every branch of science, chemical, physical, engineering, toils ceaselessly for the satisfaction of the leading human desire in this terrible time —the destruction of our fellow-creatures. Mighty are the new forces which man has moulded to his will since Waterloo, just over a century ago. The far-off blazing sun has been harnessed in coal-force, and fire has been wedded to water that steam, the offspring of the union, might defy the storm. The lightning-flash has been stayed and caught in wire entanglements; and that which to our ancestors was the message of the wrath of Heaven now runs docile over or under endless miles of land and sea, with news of the distant triumph or reverse of but an hour ago. Nor is it ended yet. Had we been told but twenty years ago of the coming aerial warfare, I fear most of us would just have asked—"Tell us another." Yet as the nineteenth century mastered the sea, so it seems the twentieth century has for its assigned task the mastery of the air. For the course of invention in this direction has as yet only begun.

Again we can note the difference from the days of long ago. Beyond the collection of a limited supply of provisions the savage makes hardly any preparation for war; and though Fuzzi-Wuzzi is "a fust-class fighting man," his

notions of commissariat do not run to more than he can carry himself, or have carried for him on a few camels or pack mules. Even when we consider the more civilized and highly organized nations of antiquity, this comparative simplicity is still conspicuous. Grote says of the army collected by Xerxes for the invasion of Greece that "never probably in the history of mankind has there been brought together a body of men from regions so remote and so widely diverse, for one purpose and under one command." Yet the forty-six nations contributing, according to the estimate of Herodotus (VII, 61–96) some five and a quarter millions of men, are provided for by the simple plan of forcing the territories through which the army passed to provide for it one day's meal; and for many months provisions were collected to meet the demand. So that Megakreon of Abdera advised his fellow-citizens to thank their gods that Xerxes wanted but one meal in a day; had he ordered breakfast as well as dinner there would have been nothing before them but exile or destitution. And now, under the one genius-directed command of Foch, more than double that number of men are mustered from regions more remote than had ever been dreamed of in the geography of Herodotus, and that on one side of the conflict alone, and for the one purpose of saving civilization, and redeeming the destiny of man as something superior to that of the brutes.

To satisfy so vast a complexity of wants we must *Produce*. We must mould matter to our will. In this "war of munitions" we have

revealed to us an army and a navy with wants so complex that all the constituent parts of the greatest industrial organization the world has ever known have had to be turned upside down in order to provide us with a sufficiency of the munitions we most need.

And here we must consider the exact meaning and nature of the process to which we give the name of production. From the physicist we learn that the sum-total of matter is unalterable; we can neither add to it nor subtract from it by the substance of a single grain. All therefore that we can do, all that we actually do, when we are said to produce something, is to rearrange pre-existing matter from a form in which it is less, to a form in which it is more, capable of satisfying a human want. The man who "produces" a mahogany dining-table does but alter a pre-existing tree from the form of a tree to the form of a log, then the log into numerous planks, then the planks into the form of the table, the form in which it satisfies a want of man. The tree in its original condition could satisfy no want. It has been moved and its parts rearranged until in its new desire-satisfying form it takes its place in civilization as a "commodity." And man has done the rearranging, but Nature has supplied the matter to be rearranged. Whence the limitations of our humanity. For it is only *suitable* material that we can so rearrange as to satisfy a want of ours. And wants for which no suitable material exists can never be met by thought or toil of man. The old legend tells how the devil himself failed to twist a rope of sand. If a rope

be wanted there must first be found a material upon whose particles Nature has imposed the property that they tend to adhere longitudinally. Such material is called a fibre; and failing a fibre, we must go without a rope. This is the economic side of that "harmonizing with the environment" which is the evolutionary condition of the continued existence of a species.

Here then, following the French writer Courcelle-Seneuil, we find the definition of our economic science:– the *Science of the Endeavour to satisfy Human Want.* And want and its satisfaction must be the unit thought from which we build the whole of our investigation. Whence we obtain one or two other definitions of the first importance:—

Wealth, the sum-total of things obtainable only by human exertion, and capable of satisfying a human want.

Civilization, the state in which men want many things and get them.

Progress, the state in which men want more and more things and get them.

But man differs from the brute creation in that his wants, of infinite diversity, are also capable of infinite extension. At least, this is true of civilized and progressive man. Man cannot live by bread alone, nor can an army die by shells alone. And whereas at the dawn of humanity each human unit satisfied similar wants by similar exertions, progress and the State start simultaneously in and by the adoption of the wondrous principle—"You do that, and I will do this, and

then we will exchange." It is all but impossible to labour this point too meticulously, for it lies at the root of that portion of economic doctrine with which we shall chiefly have to do.

I venture not to hazard a suggestion as to how many centuries ago it was that the Palæolithic Age gave place to the Neolithic—the older to the newer Age of Stone, the time when men began to split the flint with a view to using the sharp edges as cutting tools, and weapons of offence and defence. Be the time when it may, it was then that mankind began to be separated by this peculiar test—that some men succeeded better than others in the difficult operation of splitting the flint. Consequently, we find that here and there are left behind the traces of a heap of chips, to mark the place where a real craftsman lived and toiled in an abode of labour, which may fairly be regarded as the forerunner of a genuine workshop. Some genius of a most towering order must have been at work in those early days, and suddenly perceived what advantage lay in this marvellous discovery:—this man can split flints better than the rest of us; therefore let him stop at home and split flints for the tribe, and we, in return for his heading of our arrows, will feed him with the game those arrows may have killed. I doubt not that the protectionists of those days rose as grandly to the occasion as would their descendants of our own time. They probably denounced their benefactor as the agent of some rival tribe, as aiming to deprive their own flint-splitting failures of their occupation, and as endeavouring to under-

mine the economic self-sufficiency of the palæolithic wigwam. But having boiled and assimilated their prophet, they began to assimilate some of his ideas; adopted his methods, and society began.

And as it has begun, so it must progress. This man chips the flint better than does that; and that man fashions the better bow; and that other hath a wider knowledge, derived perhaps from some early glimmerings of a wider love, of the ways of the beasts of the field, and beyond all others of his tribe, under his hand they thrive and multiply; and the fletcher, and the bowyer, and the herdsman stand confessed, discriminated. And still genius points the road along that same path of union by separation. For man is a mighty paradox. Just as, in the realm of intellect, you must consent to lose the old theories if you would gain the new knowledge and the new power, so, in social and economic matters, it is only by distinction, by separation of function, that you can weld the individual units into the social whole. For as in the individual organism progress from the lower to the higher forms of development is shown by the differentiation and specialization of organs, so the advance of societies from the tribe to the state must follow the path of the differentiation and specialization of functions. The jelly-fish that, with unpleasant consequences, we tread upon when bathing in shallow waters, is a low organism, and shows to ordinary inspection nothing but a homogeneous mass of equally disagreeable portions. Whereas in the case of a

kitten—a high organism—even baby knows that there is a tail at one end and claws at the other, appropriated to quite different purposes. And similarly, though uniformity of interests, of occupation, of function, begets the tribe, it is only diversity that leads up to the state. It is not until different gifts, different powers, and different desires, of different individuals have united into the solidarity of one organism that we behold mankind on the way to the construction of a modern state.

The obligation to production—to the adjustment of matter for the satisfaction of his wants—lies upon the modern as on the archaic man; nor are the preliminaries of the process altered in essential nature. For any and every act of production we must clearly contribute, in the first place, LABOUR, or human exertion for a human end. And if the productive act is to go beyond the limits of a mere "hand-to-mouth" appropriation of nature-provided food, it is no less clear that there must be provision of a stock, the result of previous labour conjoined with abstinence from immediate consumption, of materials to work upon, tools to work with, and food, clothing, and shelter to live on whilst waiting for the produced result; and this stock will constitute the earliest form of CAPITAL. And all will be preconditioned by opportunity of access to those materials and forces which are the free gift of our planet to us, and which it is usual to comprise under the collective name of LAND. These are the great "Requisites" or "Factors" of production, the precondition of our going to work to produce. But as our society is now supposed

to have begun, as our functions are now separated, we have to live together in mutual assistance—a condition of CO-OPERATION.

But this Co-operation has as it were three degrees of comparison. Simple co-operation exists when many individuals unite to do the same thing, as when many men unite to pull on a rope to hoist a sail too heavy for one. Such co-operation goes far down into the simplest forms of social union—lower even than humanity itself, for wolves hunt in packs, and bees are organized. Then, when society has begun, and humanity has started along the line of "You do that, and I will do this," we arrive at complex co-operation, or the separation of employments, wherein different persons unite to do different things, and the simpler trades are discriminated. Finally we come to the Division of Labour, whereby different persons unite to do different parts of the same thing, as in the modern manufacture of a boot. And herein and hereby the industrial state has entered upon the final stage of its development. Further and further along this path our industrial development is urged. smaller and smaller becomes the share of each man in the construction of the completed article.

And when the organization of industrial society has arrived at this stage, it is found that this Division of Labour has advantages, usually enumerated under six heads, and disadvantages under three, as follows:—

1. Increase of dexterity. It is easy to understand that a man whose whole attention is concentrated upon some small detail of manual work

achieves in course of time a skill which to the unaccustomed onlooker seems almost miraculous.

2. Saving of time in changing from one occupation to another. This is probably even more manifest in machine production than in work done by hand. A screw-cutting lathe, for instance, can be set to turn out a particular gauge of screw, and will continue to turn it out up to any required number, so long as it is fed with the required material.

3. The invention of machines is likely to occur when constant repetition has resulted in the kind of skill which reduces the requisite motions to the extreme of their simplicity. Then those motions are imitated by mechanical means, and the machine is arrived at.

So far we have the advantages of division of labour as expounded by Adam Smith. But further aspects of the same principle have been observed by later writers, such as—

4. The organization of capacity. By this is meant that when the various portions of a process of production are separated out, it is possible to assign those various portions to workmen of varying degrees of skill, so that the higher skill be not wasted on the performance of easy and simple operations.

5. Another economy in the division of labour has been observed in the saving of tools. If each operative in a given trade has to effect the whole of the production from start to finish, of an article for sale, it is clear that each must be possessed of all the requisite tools for each and all of the various operative acts in the said production.

If each man's complete "kit" consists of a hundred tools, then one hundred such workmen will have between them no less than ten thousand tools. But if the hundred men are collected into a factory, each to do his own part only in the total production, then little more than the hundred tools will suffice to operate upon material passed from hand to hand of the workers.

6. Lastly we may note the interconvertibility of industries arising from the minute separation of function between different workers. This is a principle worth a somewhat more careful attention.

From the chemist we learn how small a number of elements it is whose endless varieties of combination constitute the vast majority of the bodies whereby we are surrounded. Similarly we shall find, as we look around our household possessions, that commodities apparently of the most diverse nature are but different arrangements of a comparatively small number of different materials. What two things, apparently, can be more widely different in all features of their nature and associations than a military rifle and a domestic sewing-machine? Yet a very simple effort of analysis suffices to show that they are but different combinations of shaped wood and finished metal. So that though it might be hopeless to divert a man from making the whole of a rifle throughout to a similarly complete production of the sewing-machine, yet it stands on record that at the termination of the American Civil War, a rifle factory was converted into a sewing-machine factory, without, it is said, the dismissal of any of the hands. The

man who had been making the groove in the head of the screws for fastening the barrel of the rifle to the butt, could easily do the same for the screws that fixed the metal of the machine to the table thereof. And so on throughout: the fractional portion of the whole production assigned to each man needed only instructions for a trifling alteration in form and dimension, and the resulting part fitted into its place in the wholly different commodity. Hence this interconvertibility of industries constitutes one of the most potent safeguards against unemployment – one of the best possible securities for continuity of function; and therein a most valuable contribution to the best interests of the working classes.

But we must not suppose that this development of industrial organization is an unmixed good. Certain evils do tend to attach themselves to it, and call for forethought and care for their prevention. These may be classified under the three heads of—

1. Physical. Constant employment in certain trades may become dangerous owing to exciting certain diseases in the workers. Anthrax the disease of the wool-sorters, the steel-grinders' asthma, the necrosis of the match-makers, the lead-poisoning of the hands employed in the glazing of pottery, are well-known instances. Yet in most of these cases it is a happy reflection that science has been equal to the task of devising efficient remedies, and that the observance of proper precautions almost eliminates the danger.

2. Psychological. Divided labour has been charged with being productive of monotony, and

so destroying the workman's interest in his work. To some extent this may be true; and yet the vastly increased efficiency of modern divided labour, as compared with the mediæval craftsmanship, has opened the door to rational recreation and intellectual pleasures such as in the days of our grandfathers no working man could dream of enjoying.

3. Social. Our minute division of labour has made the various occupations within a society to be so closely interdependent that the misfortune of any one becomes the misfortune of the whole. A coal strike or a cotton famine will leave its mark on the industry of the whole community for many years. This there is no avoiding, and the remedy must be sought in a greater recognition of the solidarity of our economic interests, and a greater readiness to meet common difficulties by more complete mutuality of effort and assistance. Of which I shall have more to say in subsequent lectures.

Now this Division of Labour has its law—one of the two greatest laws of economic science, known as the LAW OF INCREASING RETURN, which may be stated thus:

> Division of Labour arises when the market is large; and is limited by the extent of the market and the nature of the occupation. It so operates that every increase in the supply of a manufactured commodity tends to be produced at *a less* than proportionate increase of cost.

This law is of such prime importance that it is essential that it should be most carefully understood and mastered. It is clear that when the

demand for an article is small, it will not be possible to assign different parts of its production to numerous separate hands. For each of the many hands must find enough to do in his particular share of the work to keep him fully employed. If in a factory a man is observed to be standing idle, waiting for a renewed supply of his share of the work to come to him, it will be *prima facie* evidence that, so far as he is concerned, division of labour has been carried too far, and that some additional portion of the industry should be assigned to him, so that his time may not be wasted. Not that this is necessarily the case. It may possibly happen that though his function does not fully occupy him, it would not be possible to give him an additional function to perform without imposing upon him more than he could get through, and several others might have to wait for him. And clearly, it is better that one should wait for many than that many should wait for one. So that it will not be possible to remedy this defect under present conditions; and it will be necessary to wait until, the demand for the article being increased, this man's share becomes sufficient for a full day's work.

Further, the nature of the occupation will in itself set a limit to the extent to which the division can be carried. Whilst the alteration of the raw wool into the form of cloth by the processes of spinning and weaving admits, under modern conditions, of almost endless minuteness of division of function, yet the conversion of a given small piece of the finished cloth into the form of the waistcoat - the final form in which it may be

expected to satisfy the human want—would obviously not allow many men to get at it all at once, and the final adjustment must be the work of a single pair of hands.

But when the right degree of division has been arrived at, as it soon is, by experience, then the effectiveness of the various advantages of the division at once becomes apparent. Skill is increased, time is saved, machinery is improved, the developed skill is not wasted upon simple processes, nor are labour and capital thrown away on the production of needless tools. The expenses are reduced per unit of produce, and the commodity becomes cheaper to every individual consumer.

In contrast with this law of the factory stands the great law of production in the field—known as the LAW OF DIMINISHING RETURN; and this law tells us that

> After a certain not very advanced stage of agriculture every increase in agricultural produce tends to be obtained at a *more* than proportionate increase of cost; unless the arts of agriculture have meantime been improved.

Greatest of all of our economic laws is this Law of Diminishing Return, greater even than the correlative law of factory production, greater in that it rules the production of the raw materials on which the factory depends for its very existence, so that it stands, an ever-present influence, behind the factory, threatening even the Giant Machinery with inanition owing to shortness of pabulum, or failure of driving force. Develop as you please the organization of your cotton-mill, drive with

ever more ponderous power of fly-wheel the myriad spindles of the thousand frames, raise to a deafening shriek the clatter of your power-looms, drill with your "scientific management" each human atom of your countless hands till every motion of limb or finger yields its maximum return of finished product -yet all the while, far away across the sea, the failure of the cotton crop may cry you halt, the distant storm may render vain your effort ere even your effort has begun, and all human skill be brought to naught if Nature's powers declare war.

In the production of food the law is seen in the form and manifestation most readily understood, and also, unhappily, most readily forgotten. Suppose a man in a "new" country to start on the cultivation of a certain definite area of land, devoting to it in the first instance a certain definite amount of capital and of labour—in more technical terms, applying a certain measurable dose of labour-capital-effort. He will obtain a certain yield of the produce at which he aims, say wheat. Now if in the next season he doubles the dose of labour-capital-effort, then, the land being supposed to have been highly fertile virgin soil when he began, it is possible that he may reap even more than double of his original harvest. But our law tells us that the doubling of the effort cannot for long be followed by the doubling of the yield. Soon the added doses, though always yielding some increase of crop, will return a less and less increment in answer to each added dose. And the time will come when the increment of yield for an additional dose will be so small as to render

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it no longer worth while to further increase the effort for so small an additional return. Improvements in the arts and methods of agriculture may drive back for a time the tendency to smaller proportional increase; but after each improvement the downward tendency reasserts itself, and the yield in answer to successive doses again diminishes. Nor is the case made any better by taking fresh land into cultivation. It may be safely assumed that our agriculturalist, when he started, began upon the land best suited to his purpose; so that the taking in of other land will, owing to distance from market or lower quality, or greater expense in clearing or otherwise preparing the soil for cultivation, still prove, after a short spell, less productive per dose of labour-capital-effort.

Many attempts have been made to disprove this law, or to assure mankind that it may be safely disregarded. But it remains a bed-rock fact of economics. In fact, Mill was perfectly right in saying that if it were capable of disproof, or of being overcome, the whole of economics would have to be rewritten. It is perhaps most easily demonstrated indirectly, by observing that if it were not true, it would be always possible to double the yield of corn on any given area by simply doubling the care and capital devoted to that area. In such case, a single acre of land would suffice to grow corn for the whole human race, since nothing more would be requisite than to keep on doubling the dose of effort in order to increase the yield to any required extent. Unless the objector be prepared to admit this

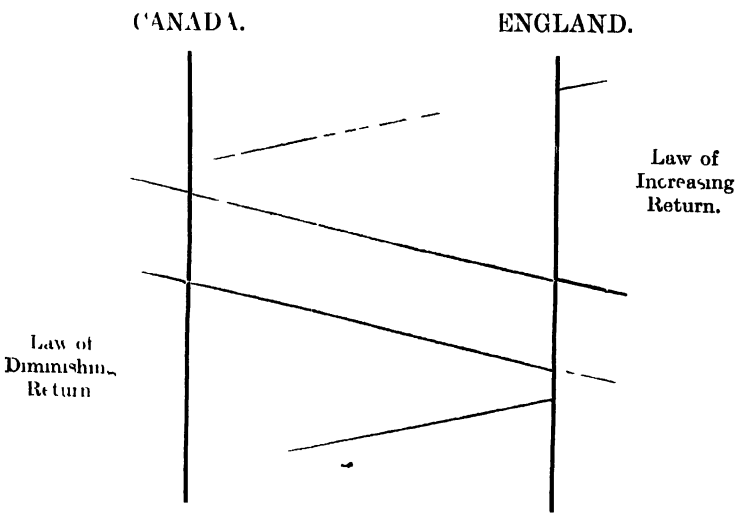
absurd conclusion, the law must be accepted as it stands.

Now we may illustrate these laws in a very simple way, taking as our illustration two of the most common musical signs—the *crescendo* sign and the *diminuendo* sign. If you take the *diminuendo* sign  it shall represent for us the Law of Diminishing Return, which is, that as you advance along from left to right, for each increment of your labour you shall have a less and ever less increment of return. That is the great law of agriculture, the law under which man feeds himself. And then reverse that and you have this *crescendo* sign  , and here is the great Law of Increasing Return, which tells us that for every increase of our production, for every increase of the labour-capital-effort we put into the production of commodities of this kind, we shall obtain more, and more, in ever-increasing amount per unit of such effort.

Well now I have put these two in juxtaposition: here  is the representation of the great law under which we feed ourselves; here  is the representation of the great law under which we clothe ourselves feeding ourselves in the field and clothing ourselves in the factory, in accordance with these two laws, operating together. Of course, you must allow me to say that I do not mean that this is so in any exact mathematical proportion. I speak roughly, as must be the case with all economic generalization; but, as the country advances, there is this tendency, that just as its manufacturing industries get more and more potent with every increase of demand or

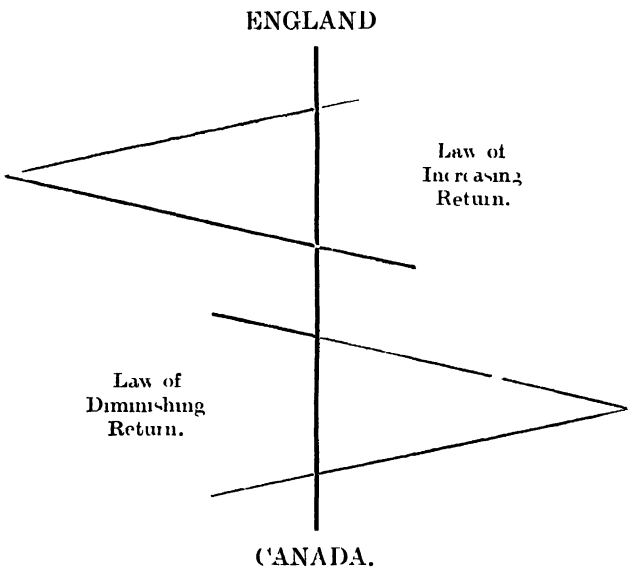
every extension of markets, so the yield of production per item of added cost in its agricultural industries becomes less and less as it goes on. Therefore, if a country is in isolation, you find its Law of Diminishing Return is ever pressing harder and harder upon it, somewhat as the Law of Increasing Return is becoming more and more generous to it.

Let us compare Canada with England. Canada has not yet had to learn, to any great extent,



the hardship of the Law of Diminishing Return. Over her wide and fertile plains the saying still holds good that "You tickle them with a hoe and they laugh into a harvest." And here in England we are at the other end. Here we have the mighty effect of applying "power." Our factories are at work, our divided labour is at work, increasing our yield for every increase of our effort; but, remember that all the while,

for every increment of agricultural labour we are getting less and less. And therefore if England and Canada are to continue in isolation—Canada, a new country, remains to feed itself easily on its boundless fertility, and clothe itself with difficulty with its not yet developed power, while England remains clothing itself with immense ease, with its coal and its enormously developed



fixed capital, and feeding every increase of its population with ever greater and more pressing difficulty.

But can we do anything to remedy this? We can. Let trade supervene, and the arrangement is that we put these two symbols into a different relation to each other. Here now we have these two countries together—England at the top and Canada at the bottom. Consequently we have

England, with all her great power of machinery and what not, clothing the two countries; and Canada, with her yet unexhausted fields, feeding the two countries. And by the union of these two countries in economic harmony, each exchanging her products for those of the other, we bring it about that, under the benevolent influences of free trade, England to-day feeds herself in her factories, and Canada clothes herself in her fields.

Now here, I venture to submit, we are dealing with great truths, eternal as the hills. I here, on behalf of the science I all too unworthily represent, abjure the false modesty of any partial claim, and stake my intellectual all on the event. I am either right or wrong—there is no middle place. Mutual help and dependence constitute the condition of human progress. War may and does suspend that mutual assistance; but in so far as it does so, it suspends progress too. Let me not be misunderstood. In common with all other economists I have no word of opposition to offer against measures taken for the injury and final subjugation of the enemy, be those measures military or fiscal. As economist I have only to report that these measures have results which must be counted amongst the other losses incident to a state of war. An examination of the theory of international trade, to which I shall invite you in a subsequent lecture, will show that restrictions on such trade are as certainly harmful —as surely resultant in loss—as the blowing away of shells, the sinking of cargoes, and the devastation of standing crops. In war the one may be

as necessary as the other. But let us face the facts. Loss is not gain. However necessary in war, restrictions upon trade in time of peace mean less productiveness, a smaller ratio of human satisfaction to human effort. If adopted as a war measure, and recognized and regretted as one of the evils incident to a state of war, the economist has no condemnation of such measures to pronounce. It is only when these restrictions are advocated as permanently beneficial under peace conditions that the economist is bound to protest. It is only when the cry is heard, "Evil, be thou my good," that Science turns away, discerning, if happily it may so be, the dawning of a better day beyond the distant hills of time, content to watch and wait for the resumption of the Reign of Law.

LECTURE II

ENRICHMENT BY EXCHANGE. INTERNATIONAL TRADE

At the close of my last lecture we came to the conclusion, I trust with your concurrence, that it is so far from being economically good for man to live alone, that mutual help and dependence constitute the essential condition of human progress. And now we have to see how the concrete expression of this great principle takes the form of trade. We must proceed to show that there is and can be no exchange, from the simplest barter up to the most complicated forms of international commerce, but makes the world the wealthier. "You do that, and I will do this, and then we will exchange," we found to be the maxim wherewith the economic state starts upon its career of progress when it commences its process of self-construction. And the same guiding principle must point the way through all the ramifications of industrial and commercial growth, up to the highest and most complicated forms of economic organization. For the processes of reconstruction after disaster cannot differ in any essential characteristic from those whereby humanity in the first instance made its way to better things; the only change being surely to our vast advantage, in that we can help ourselves

in the deciphering of the future by the light of the experience of the past.

Two schoolboys return to school from the holidays, bearing with them the spoils of Christmas;—Brown minor with two penknives, and Jones minor with two pencil-cases. Brown has a knife of first-rank utility, and a knife of second-rank utility; Jones has a pencil-case of first-rank utility, and a pencil-case of second-rank utility. So far, the school as a whole contains two first-rank and two second-rank utilities. But man is an exchanging animal; and Brown and Jones, although boys, are human animals, and, as such, are certain to swap. And now the penknife which was Brown's second penknife becomes Jones's first penknife: and the pencil-case which was Jones's second pencil-case becomes Brown's first pencil-case. Each second-rank utility is promoted to be a first-rank utility; and the school as a whole now contains four first-rank utilities, and, in its corporate capacity, is clearly enriched by the process. And a process which enriches every schoolboy within a nation can hardly impoverish that nation as a whole.

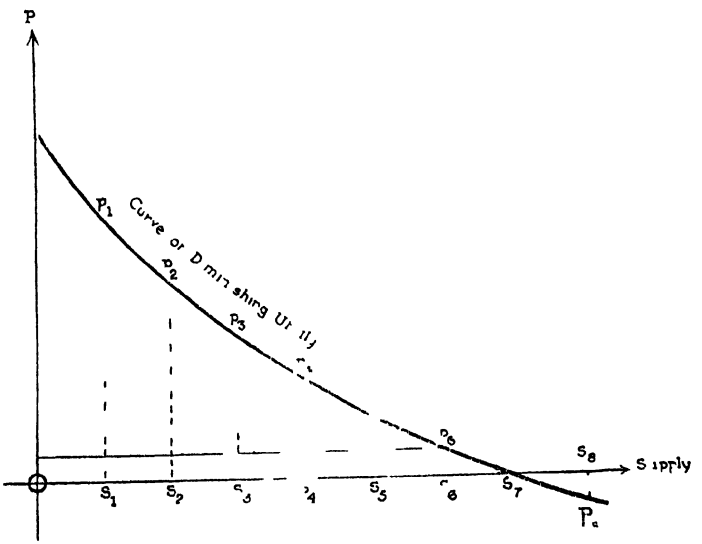
This simple example points to a principle which it is highly desirable to trace to its foundations.

There is an economic law, known as the Law of Diminishing Utility, which may be stated thus:—

> *The more a man has of a thing, the less does he want still more of that thing.*

To illustrate the operation of this law we may consider the supply, to a consumer, of the com-

modity water. The economic life-history of such a supply, and of the diminishing utility of its successive increments, can be represented in a diagram, thus: 5253



Let the successive increments of supply be represented by distances measured along O S, and the consumer's estimate of the utility to him of each successive increment in that supply by corresponding distances measured in the direction O P. As the price that the consumer will pay rather than go without each successive increment will clearly measure his estimate of the utility to him of each of them, we may take the perpendiculars $s_1 p_1$, $s_2 p_2$, etc., as representing those estimates, and the price which measures and expresses each of them; so that the point p, as it passes from its position at p_1 to that at p_8, will trace

out the "Curve of Diminishing Utility." For a small supply, $O s_1$, the consumer will pay a very high price rather than go without, a price as high as $s_1 p_1$. At a considerable price, $s_2 p_2$ he will increase his consumption to a total $O s_2$, and at a lower price to $O s_3$. And so on till his total supply is represented by $O s_6$, for the last increment $s_5 s_6$ of which he will pay a price $s_6 p_6$. And if he will not consent to pay, for any further increment of water-supply, any price at which the suppliers will consent to supply him further, he will have arrived at what may be called his Marginal Utility. His total consumption of water will be represented by $O s_6$, and, since there is no reason why any one increment in a total supply should be sold at a price different from the price of any other increment in that supply, the whole of his consumption will be charged to him at $s_6 p_6$ per unit, so that his total expenditure on the satisfaction of this particular want will be shown by the rectangle $O p_6$. Thus human want dies of its own satisfaction, but with its last breath bequeathes a price to the community. Any further increment beyond the total quantity $O s_6$, and so increasing that total quantity to, say, $O s_7$, brings him to the point of "Final Utility," the point at which the curve crosses the line O S, and the estimate of the utility of the last increment becomes zero.[1]

[1] It will be observed that in most text-books of economics no clear distinction is made between "Final" and "Marginal" Utility. This appears to me to waste a word—always a serious defect in a scientific terminology. I therefore propose to speak of "Marginal Utility" as being arrived at when the consumer

And should the ball-tap at the top of his house go wrong, so that a still further supply is forced upon him against his will, and the cistern overflows, and the water pours down his stair-carpets, and damages his drawing-room ceiling, he will pay a plumber an amount $s_5 p_5$ to come and repair the defect, and so deliver him from a supply which has become of negative utility, and so worth to him just $s_8 p_8$ less than nothing.

Exchange is thus seen to arise from the fact that we do not always possess what we most want, and therefore most value. Hence in every exchange where there is no mistake made, both parties to the exchange must benefit, since, if they do not at least expect to do so, there can be no exchange in circumstances of freedom.

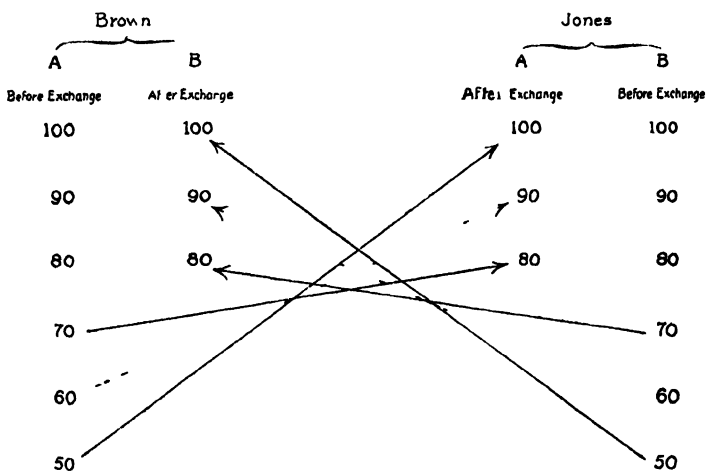
But with every exchange our stock of the thing we have received increases, and the value for us of its successive increments diminishes. So that each successive exchange lessens the value of both articles in the eyes of the exchangers so far as those articles are *received*, and increases that value for their remaining stock of the articles they *give*. This again we can illustrate diagrammatically.

Suppose that, to start with, Brown has 6 units of article A, and none of article B; and that Jones has 6 units of article B, and none of article

will no longer pay, for a further supply, any price that a producer will accept; while "Final Utility" is reached when the consumer will not, of his own free will, accept any further supply even as a gift. Final Utility thus marks the point at which any further supply ceases to be, for that particular consumer, a "good" at all in the economic sense.

A; and that their estimate of the utilities of each unit they possess in each case is 100, 90, 80, 70, 60, 50, respectively, so that the first unit is valued at 100, the third at 80, and so on, each unit taking the value which belongs to its order in the succession. Exchange will take place thus—

Brown's 6th unit of A, valued at 50, will go to become Jones's 1st unit of A, and to be valued



at 100; and Jones's 6th unit of B, valued at 50, will go to become Brown's 1st unit of B, and to be valued at 100.

Brown's 5th unit of A, valued at 60, will go to become Jones's 2nd unit of A, and to be valued at 90; and Jones's 5th unit of B, valued at 60, will go to become Brown's 2nd unit of B, and to be valued at 90.

Brown's 4th unit of A, valued at 70, will go to become Jones's 3rd unit of A, and to be valued

at 80; and Jones's 4th unit of B will go to become Brown's 3rd unit of B, and to be valued at 80.

Here exchange will stop. For clearly, if the next units exchanged, a 3rd unit, valued at 80, would in each case go to become a 4th unit, valued at 70; and there would be a loss of value on the transaction.

As it is, each side gains. Before exchange began each side possessed in units of value

$$100 + 90 + 80 + 70 + 60 + 50 = 450;$$

when the exchange is over each side possesses value to the extent of

$$2\,(100 + 90 + 80) - 540.$$

So that a community which contains these two individuals enriches itself by their transaction in and by the increase of its value-units from 900 to 1080.

Exchange is thus a process of enrichment along the path of Final Utility. Obviously then, restrictions upon exchange enfeeble the process and limit the enrichment of both parties to that process. Restriction, therefore, however necessary it may be in time of war, as part of a purposeful and even wise expenditure, is never, even in war, anything but an expenditure—an expense to be put down amongst the losses due to war—a loss which in time of peace becomes a sheer insanity.

Let us now extend this investigation from the dealings of individuals to the collective commerce

of nations. Not that nations trade with one another in their national capacity. By "international trade" is meant merely the trade which is carried on by numerous individuals in one country with numerous individuals in another country; a trade which, owing to a natural development of localization of production, or international division of labour, tends to result in goods of one broad description flowing in one direction, to be exchanged for goods of a different broad description flowing in the opposite direction. Individuals in agricultural countries send agricultural produce to manufacturing countries, to be there exchanged for the manufactured products which individuals in the manufacturing countries have produced expressly for the purpose of export, with a view to the purchase of food, and other produce of the field.

Now when we contemplate the industrial conditions of any particular country, say for instance our own, we shall observe that each industry readily moves from place to place within that country as the advantages of change of locality present themselves. To take a well-known instance, the changed conditions of England, collectively known as the Industrial Revolution, had the effect of moving many of our leading industries from the south to the north of the country. And it may be safely assumed that if certain advantages, even though comparatively small, were presented to the view of the owner of a boot factory in Leicester as resulting from a move to Northampton, the move would all but certainly take place; nor would there be any really for-

midable obstacles in the way of such a change of locality. In technical terms, Local Competition may be regarded as practically perfect as between different localities within the same country. But such freedom of motion does not obtain beyond the limits of the particular country. To move the boot factory from Leicester to Lille would be an undertaking of quite a different magnitude and character, one beset with such difficulties that though not in the strict sense an impossibility, it would lie quite outside of ordinary business contemplation. This distinction will provide us with an economic definition of a Nation, thus: –

> A Nation is a collection of numerous individuals living on an assignable portion of the surface of the earth in a condition of social organization, and such that local competition within it may be regarded as perfect, and beyond it as negligible.

It should be observed, in view of considerations which pass beyond the limits of elementary economics, that this definition must not be taken too absolutely. It is not absolutely impossible to remove a factory from the limits of one nation to those of another, nor is the move from one town to another within the limits of one and the same country wholly without difficulty. But just as a good deal of useful knowledge about the pulley and the lever can be conveyed on the supposition that the strings of the pulley are perfectly flexible, and that the lever is perfectly rigid, so we will for our present purpose assume that internal local competition is of perfect flexibility, and

external change of locality rigid to the point of immobility.

Now between two such nations, as thus understood, trade may arise in any one or more of three ways, two of which need no special explanation, whilst the third presents to us the problem of International Trade in the form frequently, though perhaps not altogether soundly, regarded as peculiar to it. We will state and illustrate these three forms by means of concrete examples.

First let it be supposed that England can make hardware and that Spain cannot; and that Spain can make sherry and that England cannot. Then a trade will spring up of English hardware for Spanish sherry, which needs no explanation.

Secondly let it be supposed that England can make calico better than France, and that France can make silk better than England. Again a trade springs up of English calico for French silk, which similarly needs no explanation.

But, thirdly, let it be supposed that England can make *both* cloth *and* linen better than Germany. Still a trade springs up of English cloth for German linen; and the question is how and on what terms this can happen; and the answer is the *Theory of International Trade*, as, and to the extent that, international trade has a theory of its own.

We must start with a clear comprehension of what is meant by making a thing "better" in this statement. When we say that England makes calico "better" than France, we mean that in England, for the same amount of labour-capital-effort the human want for calico is satisfied to a larger amount or with a better quality, than would

or could be the case in France. And France makes silk better than England if for the same amount of labour-capital-effort the human desire for silk is satisfied with greater quantity, greater beauty, or greater durability, of fabric than would be the case if the commodity were produced in England.

So much being premised we start on the investigation of that Principle of Comparative Cost which will lead us up to the Equation of International Demand—the essence of the theory of International Trade.

We commence with the statement of five simplifications in the presence of which we shall seek for the required principle; and when we have found it, we shall restore the corresponding complications *seriatim*, showing that no difference is thus introduced into the theory we obtain.

We shall then for the present assume (1) only two countries, (2) only two commodities, (3) transit of goods without cost of carriage, (4) exchange by barter without the intervention of money, (5) demand proportional to cheapness. All of these except the fifth need no explanation of their meaning; but this last requires to be cleared up in a few words.

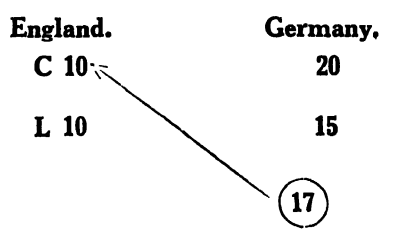
Exchange is proportional to cheapness when a man has determined to devote a certain portion of his purchasing power to the satisfaction of a certain want, no matter how much or how little of that satisfaction the assigned amount of purchasing power will procure. To take a simple instance:—A man may determine to pay so much per annum, say £50, for house-hire. If he is in a locality where houses are becoming cheaper,

he will not, on finding that he could remain in his present house for £45, do so, but will at once remove to the better house he can now obtain for his predetermined outlay of £50. If house-hire rises, he will move into a smaller house, so as not to exceed his predetermined £50. His demand is proportional to cheapness, in the sense that his expenditure does not alter, and if the price of the commodity in question falls by one-half, he at once doubles the amount of his consumption.

These preliminaries being settled, we will suppose that the two countries are England and Germany, and that England can make both cloth and linen better than Germany; and we have to show how trade still arises.

Let the accompanying diagram represent the state of things, and be read thus:—

FIG. 1.



England can make a certain quantity C of cloth with a labour-capital-effort 10, and a certain quantity L of linen with the same labour-capital-effort 10. Such commodities will tend to exchange in proportion to their respective expenses of production; so that this quantity of cloth, no matter how much or how little, will in England exchange for that amount of linen, no matter how little or

how much. And C 10 will be the cloth-price of L 10, and L 10 will be the linen-price of C 10. Now let it be that the same quantity and quality of cloth that England can make with labour-capital-effort 10, Germany can also make, but with labour-capital-effort 20; while the same amount of linen that England can make with labour-capital-effort 10 Germany can also make, but at a cost of labour-capital-effort 15. A trade will spring up as thus:—

Germany will come to England and say—Give me as much of your cloth as you can make with labour-capital-effort 10 in exchange for as much linen as I can make with labour-capital-effort 15; you will get as much linen in exchange for your cloth as you do from your own man, whilst I, at cost 15, shall obtain as much cloth as I can make at cost 20. But England replies that by this exchange she will gain nothing. So Germany has to amend her offer. She now proposes to England to give the product of 17 labour-capital-effort units of linen for the product of the ten labour-capital-effort units of England's cloth. And if we assume that this offer is accepted, we find that both countries benefit by such an exchange. England *gains* two German commodity units *of* linen; and Germany *saves* three German effort units *at* cloth.[1] Both the gain on the one side

[1] The student should pay particular attention to the italicized words in the above exposition. The ratio of effort to satisfaction can be altered to the advantage of humanity in two ways, both of which are here in evidence. It is possible to obtain more commodity for the same effort, or the same amount of commodity for less effort. As shown in the text, both savings occur. England augments her command *of* linen

and the saving on the other are computed in terms of Germany, the country which is under the two disadvantages; for England gains in German linen, and Germany saves in German effort. But in both countries the fundamental benefit is the same:—the ratio of human satisfaction to human effort is altered in favour of humanity.

But it still remains to see under what economic forces the division of the shareable benefit is determined as between the two countries. For clearly, Germany would continue to save so long as she gave anything less than 20; and England would gain at anything above 15. So that, neglecting fractions, the number within the ring of the diagram might be anything from 16 to 19. And the question arises Why, if the actual number be observed to be 17, is it not 16 or 18?

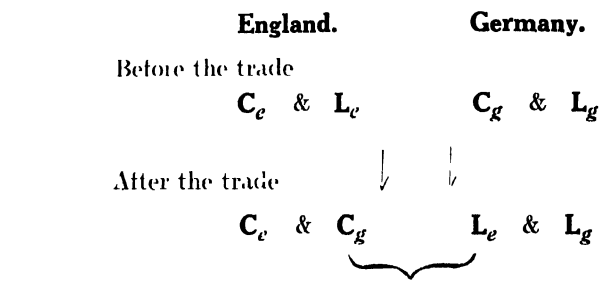
To this question there can be but one answer:—If the number be actually 17, that must be because it was made so by the influence of supply and demand on each side; in other words, because at 17 for 10 there was no German going about wanting English cloth which he could not get, and no Englishman going about wanting German linen which he could not get. If a German wanted more cloth than these terms would bring from England into Germany, the German offer would have to rise to 18; if an Englishman wanted more linen than the terms of 17 for 10

by the amount which Germany can make with two units of her effort. Germany obtains the same amount of cloth by working *at* the procuring of it to an extent diminished by three German units of effort. Or, shortly,—England gains in amount *of* linen; Germany saves in work *at* cloth

would bring from Germany, he would have to induce a larger business by offering to take 16. Thus the observed 17 must be the result of a process of finding terms at which the supply is equated to the demand *on each side*.

But it still remains to see how great is the demand on each side, and of what it consists. To this end we must refer to our second diagram (Fig. 2),

FIG. 2.



and the terms will oscillate until these two exactly exchange for each other, i e until all the cloth made in England with labour and capital set free from making linen, exactly exchanges for all the linen made in Germany with labour and capital set free from making cloth

which is to be read thus:—

Before the trade commenced, England made both cloth for herself (C_e) and linen for herself (L_e). And Germany made both cloth for herself (C_g) and linen for herself (L_g). But the trade arises, and England, ceasing to make linen for herself, but having for linen a demand proportional to cheapness, that is to say, purposing to devote the same amount of labour-capital-effort as before to providing herself with linen, now devotes that unchanged amount of labour-capital-effort to

making cloth for Germany, wherewith to persuade Germany to send linen to her. And Germany, similarly, instead of making cloth for herself, now, at the same expense of labour-capital-effort, makes linen wherewith to persuade England to send across her cloth. So that England's demand for German linen is seen to consist of exactly the amount of cloth that she can make with the labour and capital set free from making linen; and Germany's demand for English cloth consists of the linen she can make with the labour and capital set free from making cloth. The demand proportional to cheapness will not be satisfied on each side unless and until the *whole* of the cloth made in England with labour and capital set free from making linen exactly and completely exchanges for the *whole* of the linen made in Germany with labour and capital set free from making cloth. And if the terms are observed to settle at 17 for 10 as in our supposition, that can only be because at 17 for 10 these quantities completely and exactly exchange.

So far we have investigated our Equation of International Demand with the five simplifications with which we started. These simplifications we have now to dispense with *seriatim*, in order to show, as we shall be able to do, that the complications thus introduced make no difference to the conclusion at which we have arrived. And first let there be more than two commodities. The result is the same. It will still be true of the trade between England and Germany that the terms of that trade must oscillate until all the goods made in England

for Germany with the labour and capital set free from making them for herself shall exactly exchange for the goods made in Germany for England with the labour and capital set free from making them for herself. Values will fluctuate until England's exports to Germany exactly pay for her imports from Germany. Secondly, we may be asked, what about more than two countries? We reply that there never are more than two in the theory of foreign trade our own, and the rest of the world. And the values must oscillate until England's exports to the world shall exactly pay for her imports from the world; as, when *all* exports and imports, visible and invisible, are duly taken into account, they most assuredly do.

The introduction of Cost of Carriage needs a little more careful consideration. Let us imagine that it had been possible for the trade in English cloth and German linen to be carried on for a time without involving any cost of carriage, and that it was under this condition that the terms of 17 and 10 had been arrived at. And that now this free transit of cloth and linen has come to an end, and that freightage has to be paid both ways. Obviously, this will make cloth to be dearer in Germany and linen in England. The demand will be to some extent checked on each side, but to what extent we do not know. But this much we do know—that whichever side is left with the greater and more urgent demand is the side which will have to adjust its terms in favour of the other. So that, if England's demand for German linen survives the shock of

the introduction of cost of carriage better than does the German demand for English cloth, it is England which, by altering the terms in favour of Germany, that is, by consenting to reduce the 17 in Fig. 1 to 16, will have to undertake to bear the greater share of the joint cost of freightage between the two countries. And if Germany's demand remains the more vital, it is Germany that will bear the greater share of freightage; and the 17 will rise towards 18. It still remains true that, with cost of carriage as without it, the terms must oscillate until the demand is equated to the supply, and the supply to the demand, on both sides.

So far, we have taken no account of money as an instrument of such exchanges. As we shall see when dealing with the Foreign Exchanges, an actual passing of money, in the strict sense, is rare in such transactions. But when it occurs, no change is made in the conditions of the trade, nor in its results. For let us suppose that an equilibrium of supply and demand has been arrived at, on the basis of the 17 and 10 of our Fig. 1. Now suppose that an English merchant wants a considerable addition to his supply of German linen. The process is of the simplest: he orders it. And if his name is known in the proper quarters, the linen will most certainly come. It has to be paid for. So if we suppose that there is no more convenient method, it will be paid for by sending English money to Germany. And this at once calls into operation the great Law of the Value of Money, or Law of the Inverse Quantity. The value of money tends to vary

inversely with its quantity; so that as money increases in quantity its value falls, and prices rise. Hence prices in Germany rise, including the price of linen. This checks the English demand for linen; while the corresponding fall of English prices, owing to the smaller amount of money in England, stimulates the German demand for English cloth. And again the process of oscillation is set up, and continues until, at the new level of prices, a new equilibrium of demand and supply asserts itself on each side.

Lastly we have to consider the condition that demand was to be supposed proportional to cheapness. What will happen if demand is *not* proportional to cheapness?

When, according to the investigation set out in our Fig. 2, England and Germany turned from each making both cloth and linen to a division of the production whereby England made the cloth for both and Germany the linen for both, the force of a demand proportional to cheapness ensured that all the cloth made for export in the one country should exchange for all the linen made for export in the other. But such a trade will affect the expenses of production of each article in each country. Cloth and linen, both produced under the Law of Increasing Return, will become cheaper per unit in each country of origin; and the increased cheapness will as a fact increase the demand, not by an amount proportional to the cheapness, but to some indeterminate extent, less than, equal to, or greater than, such proportion. Germany may take only so much more cloth as can be purchased at the

same money value as before, and England the same increase of linen; whereupon the terms of the exchange will remain unaltered. If England is induced to take a greater money-value of the cheaper linen, then English money will tend to flow into Germany, with the consequences set out just now. It will still remain true that the terms of the bargain will oscillate till an equilibrium of supply and demand is arrived at on each side. And conversely if the increased money value is on the side of the German import of English cloth.

Here then is a course of action freely adopted by the inhabitants of two nations who obviously have no other purpose than the pursuit of their own interests. It is most important that we should note with care and precision the exact nature of the advantage accruing to each. Turning to our Fig. 1, we see that in each case the ratio of effort to satisfaction is altered to the benefit of humanity. England gets more linen for the same effort as before; Germany gets the same amount of cloth for less effort than before. A given effort produces more satisfaction: a given satisfaction is obtained at a smaller cost of effort. To each side the gain comes along with the imported goods. The benefit of international trade lies in the imports. We trade not in order to give things, but to get them.

In war this want-satisfying nexus is broken, and each nation is thrown back on its own possibilities for meeting its own wants. But in normal times the effort is on the part of those who make the goods for export; the satisfaction is on the part of those

who consume and, consuming, enjoy, the imported goods. And whosoever comes here with a supply of goods to sell to us, comes also with a demand for our goods to be sold to him. For in England the supply of German linen IS the demand for English cloth: and in Germany the supply of English cloth IS the demand for German linen. So that "supply" is only the name for the other fellow's demand; and "demand" is only the name for the other fellow's supply. "Supply" and "demand" are but two names for the same thing looked at from opposite ends. For there is no buying without selling, and no selling without buying. And in whatsoever manner this process of buying and selling is checked so as to be lessened in rapidity or extent, the result is ever the same—an increase in the ratio -

$$\frac{\text{effort}}{\text{satisfaction}}$$

But it is in the *decrease* of this ratio that economic progress consists, and every hindrance to its continuous decrease is a set-back to that progress. Civilization is the condition in which men want many things and get them; and progress consists in wanting more and more things and getting them. Thus civilization is diminished and progress barred by any obstacle thrown in the way of free exchange. The plea for what is described as national economic independence is but a proposal that every man should impose upon himself a set of restrictions to the end that his own less fruitful effort should procure for him a smaller

tisfaction than he could procure by free exchange. In war such restrictions are necessary; wherefore is war an economic loss, not only in its actual destructiveness, but also in its hampering effect upon what would otherwise be the march of progress.

It may be observed that the various satisfactions aimed at by human effort are of very varying degrees of importance. If a nation's supply of food is contracted or cut off, disaster is not very far away. And next to food, clothing; though here, as we are dealing with manufactures, substitutes are not so impossible. If the capital is but available, labour can clothe itself in the factory with all necessary speed. But England, being an island, and economically an old island at that, must obtain her food supplies, as well as very much else, from over the sea. And if England, after keeping the seas open for her imports all through the war by the might of her magnificent navy, should celebrate the advent of peace by closing those seas against herself by a system of duties, her commercial blood will be on her own self-stultified head.

It is indeed true that not every expansion of foreign trade points to a corresponding expansion of prosperity for the nation engaging in it. Foreign trade in the sense of much purchasing abroad, may, exceptionally, be necessitated by failure of the normal home supplies, or when a war converts productive into destructive labourers. But normally, every purchase *from* the foreigner is also a purchase *by* the foreigner, to the profit of both sides.

Some there are who would persuade England to turn her back on these trite and obvious truths, and succumb to a fear lest Germany, beaten in war, should beat us in peaceful trade; the *modus operandi* being what is known as "dumping"—of which more hereafter—a process of making things for five shillings and selling them to us for four, thus losing on every item, but making their profit on the quantity.

Not so. There is no possibility of any payment save by production. Economically, it is production that builds up the society. Production is the only means of construction; therefore it is the only possible way of reconstruction also. The economic processes are incapable of being reversed; to replace destruction by construction you must just begin again. If a house has been knocked down by shell-fire and you start to build it up again, you cannot work from the roof downwards. You must begin with the foundations, see that they are in good repair, and upon them rear the new edifice, to be, let us hope, stronger, fairer, and more lasting than the old.

Expand your production by all possible means, and, along with all other means, by the widest hospitality to foreign trade. To the foreign trade which brings you in amplest measure the full return for your labour-capital-effort. For this is what real cheapness means. "The real price of everything," says Adam Smith, "what everything really costs to the man who wants to acquire it, is the toil and trouble of acquiring it." So that real cheapness means that you acquire what you want to acquire at less cost of toil and trouble.

And turning once more to our Fig. 1, we see how this true cheapness asserts itself in this simple exchange, England acquiring linen, and Germany acquiring cloth, with a smaller cost of toil in so acquiring them.

I may be here reminded, though I do not need reminding, that political policy may, for a time and at a given time, declare this economically most productive and most profitable course to be, for political reasons, politically unwise. On this position I might on another occasion and in another place, endeavour to express the opinion of a British citizen, who *pace* the tariff reformers, claims to be as patriotic as the best of them. But here and now, and speaking solely as an economist, I have no positive advice to give. My function ends with making a report. And on any proposal to restrict or curtail the free exchange of commodities between nation and nation, adopted not for purposes of revenue but in order to promote the production of commodities in places where such production is at an economic disadvantage, my report is that such a proposal involves the nation adopting it in an economic loss. It means more effort for a smaller satisfaction of human want. And having so made my report, I leave it to the politicians, to the statesmen, to say whether it is wise or necessary to endure the loss in view of other than economic considerations. But to the best of my little capacity, I shall not cease in the endeavour to bring it about that the policy which decides to endure this loss shall accept with open eyes the responsibility of so deciding; and with it the

further responsibility of postponing any real peace, and retaining the nations in a condition of underground warfare—a disease of the body politic which, like some maladies of the individual frame, may be none the less malignant for being suppressed.

LECTURE III

FOREIGN EXCHANGES

In our last lecture one of the simplifications which we first introduced and then removed was the use of money, which we at first neglected, supposing the trade to be carried on entirely as a trade of barter, and then introduced, and showed to make no difference in the theory of international commerce. But it is necessary to look a little further into the nature, the rise, and the final though partial supersession, of this wonderful instrument called Money. What is money?

Man started along the road of progress with Nature's injunction laid upon him—"You do this, and let your neighbour do that, and then you two exchange." But almost at once two difficulties appeared in the way of compliance with this maxim: the difficulty of the non-mutuality of want and its supply, and the difficulty of estimating values. A man has made a hat, and wants a pair of boots; but on taking the hat to the maker of boots, finds that the latter is in no need of a hat, wanting at the time a supply of beef. And even if, in a grain market, the man who had wheat and wanted barley were fortunate enough to meet the man who had barley and wanted wheat, the question as to how much barley was to be

exchanged for ten bushels of wheat might give rise to a discussion of inconvenient prolixity. Accordingly, at a very early period of its history, civilization contrived a way out of these difficulties, by enlisting the service of some third commodity which every one would be willing to receive in exchange for his goods, and thus substituting triangular for direct barter. So the first difficulty is met. The hatter sells the hat for a sovereign, and then sells the sovereign for the boots. I say "sells the sovereign," deliberately; for though the convention of language is that he who gives money for goods "buys" and he who gives goods for money "sells," it must never be forgotten that buying and selling are but two names for the same act when looked at from opposite ends.

And the two grain merchants are helped out by means of the same contrivance. A list of prices posted in the corn exchange will show each of them the value to attach to his particular commodity, and hence the quantity of the one to be exchanged that day for a given quantity of the other.

These considerations provide us with a definition of Money, thus:—*Money is a third commodity, chosen by common consent to be a medium of exchange and a measure of value, between any and every other two commodities.* From the earliest times of which we can gather any knowledge this institution of a third commodity for the facilitation of exchange has existed among mankind, the commodity chosen being invariably some one to which special importance was at the time attached. With tribes still in the hunting state the skins

of wild animals served as a money; with nomad tribes exchanges were effected and values reckoned by means of cattle. When men had settled down into the agricultural state, the useful metals such as iron or bronze took up the money function; and at last the precious metals, gold and silver, have become the money of civilized man.

And the commodity thus fixed upon to serve as money is soon found to be capable of two additional functions. A promise to pay at a future date can be precisely expressed, exactly realized, and even legally enforced, if made in terms of money; whilst if it be desired to store up value with a view to a future transaction, the money of the state at the time will form the most convenient possible store. The process of development, a real survival of the fittest, which has resulted in the establishment of the precious metals as the money of civilization, is highly interesting, but would take us too long to trace here. But the four functions of money are of such importance that they should be kept in mind:—of such importance indeed, that they have tempted the prosaic race of economists to break out into song, and we say

> Money's a matter of functions four,
> A Medium, a Measure, a Standard, a Store

But money, in the strict modern sense of precious metal, is an expensive tool. Cannot we do without it, or find some cheaper substitute? This is possible, and the substitute will be found in the various forms of documents by which Credit is expressed and conveyed.

Credit may be defined as permission to use another person's capital. So that a man's credit can be measured by the amount of other people's capital which he can obtain permission to use. We are told in Dickens's *Christmas Carol* that Scrooge's name was good upon 'Change for anything he chose to put his hand to:—only another way of saying that his credit was so good that folk would permit him to have for use as much of their capital as he pleased to ask for. So that there can be only two reasons for giving a man credit; one being that you know him, and the other that you don't.

Now there are four principal forms in which credit can be given and taken—the Book-debt, the Bill, the Promissory Note, and the Cheque. All of these devices serve the same ultimate purpose—to replace an expensive by an inexpensive procedure. The plan of the book-debt is adopted between any two firms accustomed to supply each other with goods. Instead of making payment every time a purchase is effected they keep an account against each other, and occasionally, at convenient times draw a balance, and one firm or the other pays the difference standing against it at the moment.

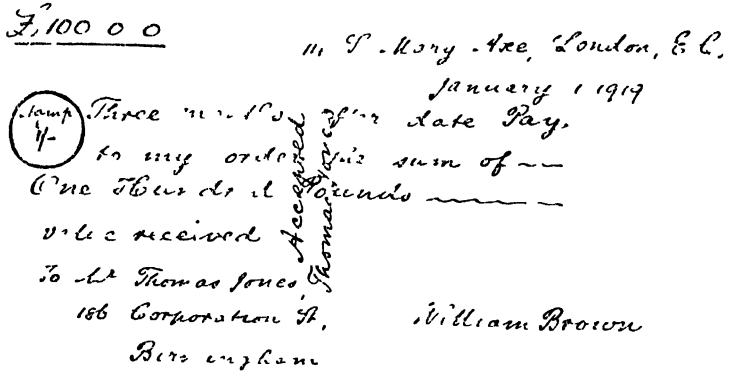
The Bill of Exchange is the most potent instrument in modern commerce, and is thus defined in the Bills of Exchange Act, 1882:—

> A bill of exchange is an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determin-

able future time a sum certain in money to or to the order of a specified person, or to bearer.

And the construction and form of such a bill would be thus:—

Suppose that one William Brown, a tea merchant, has sold tea, to the value of £100, to Thomas Jones. Brown wishes *both* to give credit to his customer Jones, *and* to receive without delay, the payment for his tea. Brown therefore takes a sheet of stamped paper, or possibly a form ready prepared and stamped, and writes:—



And Jones, having received the consignment of tea, together with the bill, writes across the face of the said bill the word "Accepted," and signs it with his name, and returns it to Brown. And now Jones has undertaken to pay this £100 on April 4, 1919, three months and three days after the date of the bill—the three extra days being "days of grace"—to any "holder in due course" of that bill who presents it for payment.

The words "for value received" at the close

of the wording of the bill mean nothing. They amount to no more than the "Your obedient servant" at the end of a letter in which you threaten to kick the addressee. But the bill as a whole is loaded with potent meaning. Jones by accepting it has pledged himself to unconditional payment. A grievance, however just, against the quality of the tea, must be adjusted independently, and gives no right to refuse to "honour" the bill. In fact, the broad principle of the law of bills may be stated in three words—Pay and proceed. For the acceptor of a bill, by accepting it, "engages that he will pay it according to the tenor of his acceptance; and is precluded from denying to a holder in due course the existence of the drawer, the genuineness of his signature, and his capacity and authority to draw the bill" (*Bills of Exchange Act*, 1882). Nor is this provision of the law in any way unjust. For Jones, on accepting the bill, returns it to Brown, who can, and probably will, indorse it by writing his name on the back of it, and either "discount" it by selling it to his banker or to a broker who makes a business of such transactions, for its "present value," that is for the £100 on the face of it, less the interest for three months at the rate then current [1]; or else negotiate it to some person to whom he himself may be indebted. And it would clearly be unjust that the bill, which may have so passed through many hands before being ultimately presented for payment, should be invalidated by a dispute between the original parties

[1] This is of course the business present value, not the true present value.

to it, with which dispute the subsequent holders will have had nothing to do.

Now in our supposed transaction, Brown, who sold the tea and drew the bill, is the "Drawer"; Jones is the "Drawee," and becomes the "Acceptor" as soon as he has accepted the bill. And as the bill may be made to serve for many transactions before it is finally presented for payment, it will pass through the hands of many "holders in due course."

But one important variation is possible from the procedure described. A bill may be drawn without any origin in an actual sale of goods. Brown may want to raise money, and may ask a loan from Jones. Jones does not see his way to lending; but believes the assurance of Brown that the money will be ready for payment before the three months' time has elapsed. So he allows Brown to draw the bill, and he accepts it; and the bill is then of the kind known as an Accommodation Bill. Between the "real" and the "accommodation" bill there are certain resemblances and certain differences. They are alike in that both are discountable, and both are as a fact discounted, and both constitute a charge on the obligant's whole estate; which last means in crude terms, that if Brown does not provide the funds for honouring the bill by the date of its falling due, Jones will have to do so, or be declared a bankrupt. The "pay and proceed" principle will preclude Jones from pleading that the bill was an accommodation one, and that he never received any value for it. His signature is conclusive; he must pay, and get the money

back from Brown if he can. Nor do the two kinds of bill differ seriously in respect of the one having goods at the back of it, and the other not. For such a bill as described may do some thousands of pounds' worth of business before its presentation; and if the credit of such a bill were to go seriously wrong, the small original consignment of tea would have but little to say in the matter.

But the differences between the two bills are very real and considerable. In the first place, the parts of debtor and creditor are reversed. Brown is creditor in the case of the real bill, having a claim to be paid for his tea. He is debtor in the case of the accommodation bill, since he has undertaken to provide Jones, before the bill matures, with the necessary funds to meet it. Hence, though some bills of this kind have perfectly sound and legitimate uses in commerce, yet other bills of the kind are less punctually met, and are not such "good paper" as bills based on a real exchange of values. Again, the real bill deals with the past, the accommodation bill with the future. For in the case of the real bill, Brown *has sold* the tea; for the accommodation bill he has yet to provide the cash. And finally, and as the most serious of the differences, real bills are limited in quantity, whereas the accommodation bills are not. If I draw none but real bills, their total amount is limited by the extent of my trade; but when I start drawing accommodation bills, their total amount is limited only by my impudence and my power to cajole. Here is the gravest objection to this kind of paper.

The drawer of many accommodation bills undertakes to meet many obligations; the acceptor of a real bill only one. And the discounter of accommodation paper may fancy himself safe in that he has many debtors, each for a small sum, whereas he really has only one, and that one under heavy obligations. If that one fails, the shock to commercial credit may possibly be serious and extensive.

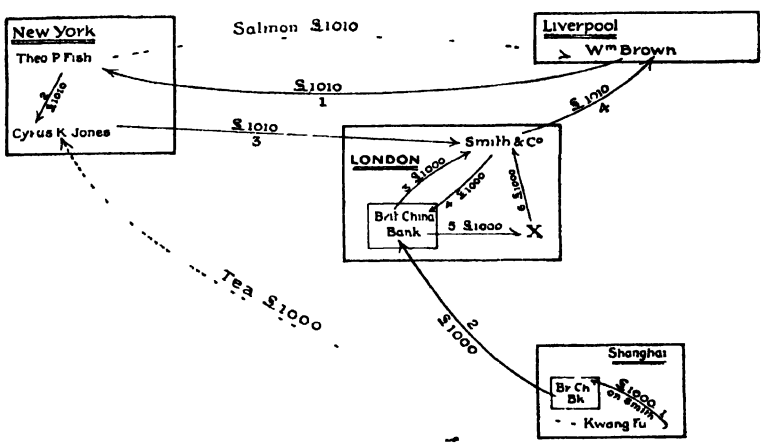
But I have said that some bills of this kind have perfectly legitimate functions, and I may well be asked what legitimate functions can inhere in bills about which I have said such apparently condemnatory things. Well, the answer brings us to the examination of some of the larger aspects of international trade as carried on by means of bills, and in particular calls for an explanation of the functions of the great "Accepting Houses" in London. These functions can best be illustrated by a diagram as here shown, wherein the broken lines show the passage of goods, and the continuous lines indicate the travels of the bills arising from the transactions in those goods.

Cyrus K. Jones of New York wants to start as an importer of tea from Shanghai. Having no large commercial acquaintance in the East, he arranges with Smith & Co., a London accepting house, to accept for him, at a charge of (say) 1 %, bills to cover his tea invoices.

Kwang Fu, in Shanghai, sends tea worth £1,000 to C. K. Jones, and, by arrangement, draws on Smith for £1,000; and sells the bill (say 6 months @ 4 % per annum) as yet unaccepted, to the

Shanghai Branch of the British China Bank for £980; and Kwang Fu, barring accidents, is out of the picture.

Shanghai Branch sends on the bill, not yet accepted, to their head office in London, by whom it is submitted to Smith & Co. for acceptance. It is now accepted and returned by Smith to British China Bank, having by this time (say) only three months more to run, and being therefore now worth £990, at which price the British



China Bank sells it to a person, X, who holds it for profit at maturity.

Meantime, one Theophilus P. Fish of New York, has been catching salmon. He eats what he can and he cans what he can't, and consigns to William Brown in Liverpool, an importer of this particular kind of preserved provisions, and draws on Brown for £1,010 for value of the salmon. Brown accepts, and returns the bill so accepted to Fish. Cyrus K. Jones buys it

from Fish, who thus gets his money, and, like Kwang Fu, is paid and out of it. Jones sends it on to Smith & Co., who present it to Brown, who honours it; and Smith & Co. pay X. £1,000 out of the £1,010 they have just received from Brown, and keep the surplus £10 as their commission on the tea transaction between Cyrus K. Jones and Kwang Fu.

It is interesting to remark that it is just here where England was so hit during the early days of the Great War. Cyrus K. Jones could not get a William Brown bill to send to Smith & Co.; so these latter were faced with the danger of having to find the money for Kwang Fu themselves. And all the accepting houses were in the same fix. So on September 5, 1914, the Bank of England came to the rescue, and undertook to lend the accepting houses the money to meet these "Finance Bills," repayment not to be claimed until a year after the end of the war.

But later on in the war the whole position was tragically reversed. England from being a huge creditor became a vastly greater debtor. We were almost at our wits' end how to pay; because payment can only be made in things; and our exports, whether visible in commodities, or invisible in services, were wholly unable to keep pace with our unavoidably ceaseless and clamorous demand for munitions of war. This contrast between our earlier and later position in the finance of the war accounts for the extraordinary course of the American Exchange, so well described in the excellent work, "The War and Lombard Street," by Mr. Hartley Withers.

From bills we turn to consider another kind of credit document, namely the Promissory Note.

> A promissory note is an unconditional promise in writing made by one person to another signed by the maker, engaging to pay, on demand or at a fixed or determinable future time, a sum certain in money, to, or to the order of, a specified person or to bearer.

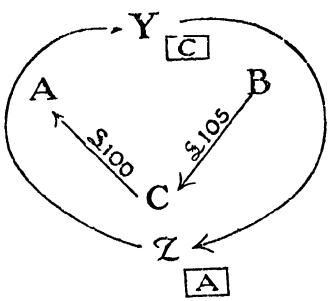
The best known case of a promissory note is that of the Bank Note, where the specified person is the person who holds it, and the fixed future time is on demand.

Now these Bank notes can be of two great classes:—the Convertible note for which you can, and the Inconvertible note for which you cannot, demand as your right to receive metallic money from the issuer to the full face value of the note. This is a matter to which we shall return in a later lecture, when dealing with the question of finance after the war.

Lastly we have the Cheque, as the fourth of the forms taken by documents for the conveyance of credit. A cheque is legally defined as "a bill of exchange drawn on a banker, payable on demand." In the early days of English banking it was known as a "cash note." And we can now show how, so far as inland trade is concerned, these cheques are the means of dispensing with the more expensive metallic money. This will best appear from a simple example.

Suppose A and B to be two merchants who bank with a banker Y; and C to be a third merchant, banking with a banker Z. On a certain

day A buys goods from C to the amount of £100 and pays with a cheque, by which he directs Y to pay £100 to C or his order. C pays the cheque in to his Banker Z for collection, so that Z can now call upon Y to pay over to him £100 to be placed to C's account in the books of Z. On the same day C buys goods from B to the amount of £105, and pays with a cheque on Z, directing him to pay that sum to B. And B pays in the cheque to Y, so that Y can call upon Z to pay him £105 to be placed to the account of B. Clearly therefore, if no contrivance intervenes, two pay-



ments in opposite directions will be taking place at the same time; Y will be collecting £105 from Z, sending a clerk to fetch the money, which clerk will be met half-way by Z's clerk, coming to fetch £100 from Y. And when they receive their respective payments they must make their way back, to meet again mid-way, but this time carrying between them £205 of very portable gold coin, exposed to all the risks of the many pirates that haunt the inlets of the Thames. But a contrivance for the avoidance of this wasteful danger is now ready to their hand. There is an

institution called the Clearing-house in Post Office Court, Lombard Street, to which both Y and Z send, four times daily, each a couple or more of clerks. And every other "Clearing" banker does the same. At present there are sixteen of these clearing bankers. Two or more clerks from each attend each clearing, and while one of them takes his place at the desk assigned to his house, another passes round the room, depositing on each of the other desks a bundle of cheques, drawn on the bankers to whom the respective desks belong, and paid in to his house for collection. By the time the peripatetic clerks have completed their round, and each has rejoined his colleague at their own desk, each desk will have, deposited on it, fifteen bundles of cheques. Then each desk calls to the others in succession, claiming from each the total of the appropriate bundle of cheques. This in each case involves a cross claim, and the difference is calculated and allowed. And it being thus ascertained that Clearing Banker P has payments to make to Clearing Banker Q, exceeding by £*x* those which Clearing Banker Q has to make to Clearing Banker P, the difference will be met by a draft on the Bank of England, where all the Clearing Bankers keep an account. Thus goods are bought and sold by merchants A, B, and C, but no money passes. The resulting cheques are set off against one another, and not even the differences paid in money, being settled by a line in the books of the Bank of England, stating that, of the total amount of the balances of all the Clearing bankers lying there, £*x* more belongs to Banker Q, and £*x* less to Banker P; a balance

which will quite probably turn in the opposite direction in the clearings of the following day. This process is repeated four times daily, the four operations being known respectively as the Metropolitan Clearing, the Morning Town Clearing, the Country Cheque Clearing, and the Afternoon Town Clearing; and in this manner goods are bought and sold every day to an enormous amount without the passing of a single halfpenny of real money.[1] The transactions of the Clearing House in the year 1916 amounted to £15,275,046,000. As 1916 was leap year this works out at about £49¼ millions for every business day.

But the important thing for our present purposes is to realize the exact nature of the function performed by the Clearing House. It has dispensed with, and rendered unnecessary, the agency of actual money. It has brought our inland trade

[1] There are four clearings held daily, viz. at 9 a.m. the Metropolitan Clearing; at 10.30 a.m the Morning Town Clearing; at the same time the Country Cheque Clearing, and at 2.30 p.m. the Afternoon Town Clearing. The latter closes for delivery at 4.5 p.m., and for returns at 5 p.m. [these times have been modified, as a temporary arrangement, since the outbreak of the war], Saturdays at 1.30 for delivery, 2.30 for returns. The two town clearings include in their collection all drafts payable at the head offices of the clearing banks within a close area of Lombard Street. The Metropolitan Clearing includes in its collection all drafts payable at the branches of the clearing banks within a wider area of London, but not extending to the far suburbs, and also certain of the West End banks. The Country Cheque Clearing includes in its collection, cheques only, on the branches of the clearing banks in England and Wales, having London clearing bankers as their agents. A distinctive mark is printed in the left-hand corner of cheques denoting the clearing to which it belongs; viz. T, Town clearing; M, Metropolitan clearing; C, Country Cheque clearing.—*See* Grant's *Law of Banking*.

back to the cheap process of barter. Civilization in its progress is ever, like the fabled Chronos of old, devouring its own children. Man invented money as a necessary precondition of making a start along the road of "You do that, and I will do this." But the start once made, the money implement is superseded, discarded; and a system of indirect barter is arrived at which dispenses with the dearer in favour of the cheaper tool.

But though any one confronted with the magnitude of these figures may well gasp at the contemplation of what credit and credit contrivances can do for mankind, we must never forget its limitations. One thing credit cannot do. It cannot *pay*. On the contrary, it has to be paid for; the amount of the payment being determined by the beautiful psychological theory of interest as worked out by the late Professor Böhm-Bawerk. Nothing but commodity can pay for commodity, goods for goods, things for things.

Hence the principle that "Credit rests on a metallic basis." A tea merchant has sold £5 worth of tea to a customer, and does not ask for instant payment because he believes, or "credits," that the customer will be able to pay in the near future. The customer "ultimately if not sooner" pays with a cheque. The dealer takes the cheque in payment because he credits that he can get payment at the customer's bank. At the customer's bank he takes a £5 Bank of England note because he credits that, if he thinks fit, he can get $5 \times 123\frac{1}{4}$ grains of certified standard gold for it; and then, but not till then, he will

handle a commodity of utility equal, in extensity and intensity, to that of his own tea.

For myself I should prefer to say that credit rests upon a *things* basis. The tea man takes the cheque because he credits that he will thus be enabled to set machinery in motion whereby he will be enabled to get (say) a suit of clothes.

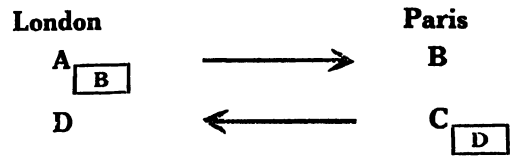
But in either case—metallic basis or things basis—we have no completed payment till we get down to the bed-rock of all economics—want-satisfying commodities.

Thus money is seen to be ousted from our inland trade. By means of the Clearing House we have arrived at a "restoration of inland barter." And it remains to see how the same restoration is effected for foreign trade by means of the Bill of Exchange. We will, as before, commence with the simplest possible case, and work our way up to the actual complication of real commerce.

Suppose that a merchant A in London sells goods to the value of £100 to a merchant B in Paris; and that on the same day a merchant C in Paris sells goods of the same value to a merchant D in London. We have just about the same difficulty to overcome as in the case of the inland dealers A, B, and C, and their respective bankers X and Y. Unless some contrivance intervenes, B will have to send £100 in gold (we omit for the present the difference between the two currencies) across the Channel, only to be met half-way by the £100 which D is sending to C. Here is in the first place a risk of loss, and also the cost of freight and insurance, which—again for the sake of simplicity—we will suppose to be

½ %, that is, 10s. for the £100. Naturally the two merchants, B and D, will endeavour to avoid this expense. So in rudimentary form—too rudimentary, as we shall in a moment see, for actual practice—they may be supposed to proceed thus :—

FIG. 1.



A draws a bill on B for £100 at say three months, sends it to B who accepts it and returns it to A. At the same time C draws a bill for £100 at three months on D, who accepts it, and returns it to C. The position is now as shown in Fig. 1, wherein, as in all the diagrams I shall have to show concerning the Foreign Exchanges, the arrows point to the direction in which *goods* go. A is now in possession of a bill with B's name on it, and C has the bill for the same amount with D's acceptance. There are thus two creditors, A and C, and two debtors, B and D.

One of the two debtors, let us suppose it to be D, now wishes to pay off his debt. He goes across to A and proposes to buy from A the bill accepted by B, and to pay £100 to A for it. In the exchanges the principle *non olet* rules; and A cares not a jot whence comes the money for his goods, so long as he gets it. A is paid, and is out of the picture. D sends B's bill to C, and receives back his own bill in return; which bill D, a prudent man who remembers the maxim "Pay and proceed," forthwith destroys, to put

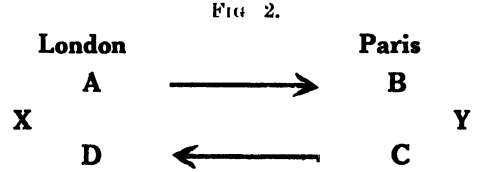
it beyond the reach of accidents. And D vanishes. C goes across to his neighbour B, and presents the bill with B's acceptance; and B honours it, so that C is paid, and we hear no more of C. B does as D did, and destroys his bill as soon as he gets his clutches on it; and B also vanishes. *Exeunt omnes.* And the final result is that the claret sent by C to D pays for the Manchester goods sent by A to B; and *no money has passed between the two countries.* Hence the definition of the Foreign Exchanges:—

> A system of contrivances by which the debts and credits that are near together are made to settle the debts and credits that are far apart.

Again money has been dispensed with, and barter is brought back to the wider sphere of international trade.

But it should be obvious that we have here taken a number of difficulties in our stride. How did B know that A had a bill at all, and still more, how could he tell that the bill held by A would be for just the right amount for paying the debt he wanted to settle? Of course he could not know; but in practice there is no need for him to know. For our Fig. 2 shows that there are

Fig. 2.



two persons, one X in London and one Y in Paris, called bill brokers, whose function it is to buy

and sell bills. As soon as A gets this bill duly accepted from B, he "discounts" it with X, that is, he sells it to X for the £100, less the interest at the current English rate, for the time the bill has to run. Bills take their nationality from the acceptor; so A is said to discount a French bill in London.[1] The bill we supposed to have been drawn at three months, and if we take the English rate of interest at 4 %, the selling price of the bill, the price that X will give for it to A, will be £99, being the face of it less the three months' interest at 4 %. Similarly, C will sell his English bill to Y on similar terms, getting more or less than £99 for it, according as French interest is at less or more than 4 %.

Now let us extend our view, so that the A, B, C, D, of our diagram shall stand, not for individuals, but for classes of individuals. The A's are the English exporters to France; the B's are the French importers from England; the C's are the French exporters to England, and the D's are the English importers from France. So that any D who has a payment to make in France goes to

[1] "A bill takes its nationality from its acceptor." Students referring to Sec. 4 (1) of the Bills of Exchange Act, 1882, may notice that this statement differs somewhat from the strict legal position. According to that section, "An inland bill is a bill which is or on the face of it purports to be (*a*) both drawn and payable within the British Islands, or (*b*) drawn within the British Islands upon some person resident therein. Any other bill is a foreign bill." Legally, therefore, a draft on London issued in Paris, or a draft on Paris issued in London, are both foreign bills; but the language of practice does not make them both to be so. A bill payable abroad is in practice called a foreign bill; and one payable in England is not. (*See* Clare, *A B C of the Foreign Exchanges*, p. 39 n.)

an X, and finds there a bill of the kind he wants, just as certainly as he would find a hat to fit his head in the shop of a good-class hatter. The X's and the Y's may be specialists in this class of business, or they may be just ordinary bankers, by whom such business is also done.

So far we have supposed that the exports from England to France and from France to England have been of equal value in sum. There will in these circumstances be a bill for every D who wants to buy one from an X, and a bill for every B who wants to buy an English bill from a Y.

Before proceeding further let us once more make quite certain as to why B and D want to buy bills. They want to do so because if they do not, they will have to face the trouble, risk, and expense, of sending the gold across. This expense we supposed to $\frac{1}{2}\%$; so that D is asking X to save him 10s. on each £100 he has to send to France, and B will be indebted to Y for saving him a similar amount. If he could not get the bill it would cost D £100 10s. to make his purchase in France; and if B could not find in Paris an English bill, he too would have to expend £100 10s. in payment for £100 worth of English goods. To be saved this expense is a service worth paying for- one that will command its price. What price, and how fixed?

So far, we have assumed a bill for every buyer, and a buyer for every bill;- a state of things in which there clearly can be no reason why the bill should sell for any other price than the face of it. But if there should happen to be many B's in Paris who want to make payments to

London, and the exports from Paris to London, having been small, have not given rise to the presence of a sufficiency of English bills in Paris to meet the demand, the Y's, when applied to for an English bill, will be able to raise the price of such bills, relying on the competition of the buyers to pay the enhanced price rather than go without. So that a B, going with money in hand to a Y for the purchase of an English bill, will find that his French money will buy more or less in amount of such English bill, according to the relative condition of supply and demand at the time. In technical terms, the "Rate of Exchange" goes up or down as between England and France; and we have the definition:—

> The Rate of Exchange means the power which the money of one country has of purchasing the money of another. Or more shortly, The Rate of Exchange is the price of a bill.

So when the supply of bills is equal to the demand for bills we find that the bill sells for the face of it, or "at par." But what *is* "par"?

Living in London I do not possess French money; I have only Pounds sterling. And for one hundred of those pounds I want to buy a bill on Paris,—a bill that shall give me the power to spend French money in Paris. The question is, "What is the normal amount of French money that I can get the right to receive in Paris in exchange for my £100 here in London? What *is* par?"

A moment's reflection will show that a real, or "Mint," par is attained when, for the expendi-

ture of a given weight of *fine* (or pure) gold here in London, I obtain command of the same weight of fine gold in Paris. This is the real par of exchange; and when the bills on each side are at such a price that this is the case, the rate of exchange is said to be at "Mint Par."

Hence the actual point of Mint Par will depend on the currency laws of the countries concerned. For example, as between England and France, the matter stands thus:—

The English sovereign has for its exact statutory weight, 123·27447 grains Troy, which is equal to 7·988 grams. And our sovereign is 22 carats fine, that is to say that 22 parts out of 24 of its weight are pure gold. The French gold coinage is 9/10 fine as against our 11/12. And out of one kilo of gold they coin 3,100 francs in gold, which therefore contain 900 grams of fine gold. Hence we calculate, by "Chain Rule"—

fr. x	1 £
£ 1	7·988 grams
grams 12	11 grams fine
grams fine 900	3,100 fr.

This gives

$$\frac{7{\cdot}988 \times 11 \times 3{,}100}{1 \times 12 \times 900} = 25{\cdot}2215 \text{ fr., Mint Par.}$$

So that the exchange between England and France is at Mint Par when, for an expenditure of one pound in London, I can obtain the right to claim,

for myself or my assigns, 25·22 (25 francs 22 centimes) of French money.

We return to our merchants and brokers in London and Paris. And we can now consider a state of things which we represent in Fig. 3, page 80. In this case London has sent more goods to Paris than Paris has sent to London, indicated by the double head to the London—Paris arrow; and consequently there are more French bills in London than English bills in France. So when a B goes to a Y to purchase an English bill wherewith to make payment to London, Y is *désolé*, but Monsieur B must understand that there are so many B's and so few English bills that it is obviously impossible that Y should sell him a £100 bill for the plain 2,522 francs. No; the cost of sending the 2,522 francs would be, say, 12 fr.; so the price of the English £100 bill to-day will be 2,534 francs. And if Monsieur B does not care to pay so much for the English bill, Y knows of P, Q, R, S, and T, all of whom are in want of an English bill and any of whom will be delighted to give that price. So B, seeing no way out of it, and realizing that if he does not buy the bill, he will have to lose the 12 francs (accurately, 12 francs, 61 centimes, being ½ per cent. on 2,522 francs), pays up, looking as pleasant as the circumstances permit. But, be it carefully observed, B cannot be expected to like it; for this ½ per cent. is a net subtraction from the profit he looked to make when he imported the English goods in the way of his business.

In such case there may be said to be a *Premium* on the English bill in Paris, since it sells for more

than the face of it. But a reference to the diagram will show that when there is premium in Paris there will, under normal circumstances, be the opposite of premium, that is, discount, on the French bill in London. For the arrows show the way *goods* go; and the bills must go the other way. So that the excess of English exports to France over the exports sent from France to London, brings it about that the X's find their portfolios stuffed with French bills which nobody seems inclined to come and buy. So the X's begin to be afraid that they may have to go and fetch the money from Paris, and bear the consequent expense of the journey. So when a D does turn up to buy a French bill, that D can point out that there are lots of French bills in London, and that if X No. 1 will not sell him such a bill as he wants for the face of it less the $\frac{1}{2}$ per cent. it will cost him to go and get the money, there are plenty of other X's who will. So it is the turn of X, the broker, on the English side, to take £99 10s. for his £100 bill.

Under ordinary circumstances there will be limits to the amount of this premium on the one side and discount on the other. When the price of the bill in Paris has gone up to a point at which the premium is as much as the cost of sending the gold, there will be some B's who will send the gold, and some who will pay the premium. And at this point, where it is indifferent whether to send or pay, the exchange is said to be at "specie point premium." When, on the other side, it is indifferent to the X's whether they sell the bill or pay the cost of getting the gold over from

France, the exchange is said to be at "specie point discount." So that the one specie point is as far above par as the other is below it; and the two specie points are separated by twice the cost of carriage of the gold. This gives us the ordinary limits of exchange variation,—limits which can, indeed, be exceeded, but under circumstances which it would take too long to explain here.[1]

But it would be a mistake to imagine that there are only two prices for a bill of exchange in addition to the normal or par price. It might be supposed at first sight that if bills are short in supply some purchasers would be left quite without, and that the competition of such purchasers would at once force up the price of the bill to specie point. And similarly that when there is an over supply threatening that the money will have to be fetched, the competition to sell would at once reduce the price to specie point discount. But as a fact bills do sell for all possible prices between par and specie point, for this reason:—There is always much speculation going on about bills. Suppose that on some particular day, some one of the D class thinks that the French bill will probably be dear next week, at which date he knows that he will be wanting to buy. He sends a clerk to his broker, therefore, to buy the bill to-day; and if his action is noticed in this very sensitive market, others will follow his lead. And X looks out of his office window and sees a vista of D's all coming his way to buy; and does not feel called upon to announce to

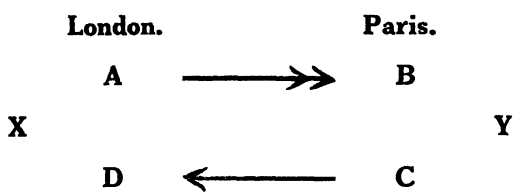
[1] See Bastable. *Theory of International Trade*, pp. 84 *sqq.*

them that he has plenty of bills in hand, and that they can quite safely wait. So the price of the bill goes up. But not to specie point; for if it rose to that point the D's, knowing that nothing worse than that can befall them next week, will elect to wait. In this way the bill can rise to any point short of specie point, which last position it can only reach when there is a real shortage. Consequently, it does not by any means follow that whenever the exchanges depart from par, there will be a passage of gold from country to country. The varying rate may only point to a particular and passing phase of speculation. Hence it becomes necessary to examine any problem in the exchanges twice,—first within the limits of the specie points, and thus involving no passage of gold, and secondly with the specie points reached, and the gold actually moving.

The leading theorem in the exchanges is that *The Exchanges tend to par.* This is not only a theorem of the utmost importance in itself as the leading fact in the theory of the exchanges, but affords an excellent illustration of the exact meaning of the word "tendency" in economic science. An economic phenomenon is said to "tend" to a certain position when the very fact of departure from that position is itself a force which acts in the direction of restoring that position. Thus in physics, a pendulum "tends to the vertical" position in just this sense. At rest the pendulum hangs vertically; and any disturbance, moving it, say, to the north-east, sets to work a force which impels it, as soon as set at liberty, to swing back through its original

vertical position, and on towards the south-west. In this line it will continue to vibrate, with ever smaller and smaller vibrations, till at last it comes to rest again in that vertical position to which it "tends." Now it is exactly in this sense that the exchanges are said to "tend" to par. Par is their normal position, the position to which they tend to return, in the sense that any disturbance causing them to move away from par is in itself a cause of their moving back. Reference to Fig. 3 will quickly show how this takes place.

Fig. 3



The figure shows excess of English exports to France over English imports from France, and therefore discount on the French bill in England, and premium on the English bill in France. This state of things tends to cure itself as thus: -

The condition has been brought about by an excess of business between A and B, and a defect of transactions as between C and D. But look at the diagram, and consider which of the four parties is likely to be pleased with this state of things, and which will dislike it. Take first A. He sells his goods to B, but when he receives B's bill, he cannot get the full value for it, or, in other words, he loses part of his expected profit on the transaction. So A informs his travellers in France

that, owing to the state of the French exchanges, he is not pressing for orders just at this moment; and if they want a few days' leave, now is the time to take it. Nor are the B's any better pleased. Such of them as want to buy a bill on England with a view to purchases there, will find on reference to Y, that the price of that bill is put up against them; so they accordingly postpone their orders, not being willing to import British goods at a price temporarily raised by the amount of the premium on the British bill. So both the A's and the B's work for the time at less pressure, and the number of their transactions falls off. But now look at C. If he can obtain an order for his claret, leading to the receipt of an English bill, he will sell that bill to Y at a profit, which profit will be added to the regular commercial profit on the sale. He will thus be encouraged to press his sales in England as hard as possible, and all the other C's will be of the same mind. Nor do the D's fail to share in the same way of thought. If a D wants French goods, now is the time for him to buy them, since he can obtain from X a bill wherewith to pay for them on terms which amount to a reduction in their price. So the C's and the D's work at the highest possible pressure, and add day by day to the amount of goods imported from France to England, and the supply of English bills in France. As a result, goods tend towards England, bills towards France, and the exchanges towards par.

But so far we have dealt with paper only. It is possible that the curative forces may not be sufficient to restore the equilibrium of exports

and imports and to bring the exchanges back to par. In this case specie point will be reached, and the gold will begin to move from France into England. Then comes into action the law of the value of money, known as the Law of the Inverse Quantity. Since there is more money in England, prices there will rise, to the disgust of the B's; and since there is less money in France, its value there has risen, and French prices fall, to the vast encouragement of the English D's. Again as with the paper, our imports will increase, our exports decrease; goods will tend to England, bills to France, and the exchanges to par.

Another highly important theorem in the exchanges, and one of great value for our purpose, is that which tells us that—*A Foreign Loan sets the exchange against the lending country.* First, to be sure that we understand the terms of the theorem. When the exchanges between country A and country B are in such a position that there is a tendency towards, and a likelihood of, money coming in to country A, the exchange is said to be "favourable to" that country; and, per contra, to be "against" country B. When the exchange is so that a given sum of English money will command less than its par value in France or other foreign country, the exchange is said to be "against" England; and since this will reciprocally involve that French money will purchase the right to more than its par value of English money, the same state of the exchanges will be "favourable to" France. In such case the French bill will be at a premium in England, so that English merchants will have to give more than £100 for

the right to spend £100 in France; and French merchants will, for less than £100, obtain the right to £100 in England.

Now for the effect of the Foreign Loan. We will take no account of the machinery of underwriting, and fees, etc., etc., and proceed straight to the essentials of the transaction. Suppose, then, that England undertakes to lend to Spain, say, one million. The exchanges will be set against England. But there is nothing strange about this fact:—in private life it is of daily occurrence. Suppose that Brown and Jones meet one day at a distance from the home of either, and Jones asks Brown to lend him £5. Brown replies that he will do so, but he has not £5 in his pocket at the moment:—"I'll send it you when I get home," says Brown. Now observe carefully that though Brown will ultimately be the creditor of Jones for that £5, yet, for the remainder of the afternoon, he is, in virtue of his promise, debtor to Jones. And as such, he, Brown, will have to get the money across to Jones, and will pay the expenses of so doing. He will draw a cheque which will bear a stamp, value 2d. Then he will send it by letter to Jones, and the postage will cost him another 1½d. So it will cost him as a whole £5 0s. 3½d. to become the creditor of Jones for £5; and the exchanges have been set against the lender. Practically the same thing occurs as between England and Spain, thus:—

Spain will print 10,000 pieces of paper, each acknowledging that Spain owes the holder £100. These papers may collectively be called the scrip of the loan. This scrip is brought to London by

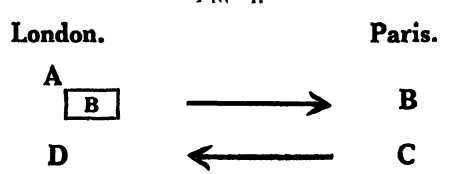
a couple of Spanish messengers, properly introduced, who get into touch with the eminent banking house of Messrs. Smith, to whom they hand over their scrip, and retire to their hotel to await developments. Smiths send for a firm of stock-brokers, hand them the scrip, and tell them to sell the constituent papers to all the clergymen, maiden aunts, *et hoc genus omne*, whom they can find ready and willing to invest their savings in such a venture, and pay in the proceeds of the sales to Smiths. When all the pieces of paper are sold, Smiths will be in possession of a million sterling, not, be it observed, in gold, but in that "unused purchasing power" which has been conveyed in the form of cheques. The stock-brokers have done their part, and retire with their fees. Then Smiths send for a firm of bill-brokers, to whom they give a cheque-book, with instructions to go out into the bill market, and wherever they see a Spanish bill to buy it, paying for it with a cheque which they (Smiths) will honour. Here is where the exchange is set against England; for the demand for Spanish bills, thus set up, raises their price, and so sets the exchange against England—the Englishman having now to give more than £100 for the purchase of a £100 Spanish bill. And now the million is all spent, and as we are taking no account of discounts and fees, etc., we suppose that Smiths are in possession of one million's worth of Spanish bills. These they hand over to the Spanish emissaries, who take them home to Spain, and hand them to their own Government, by whom they are presented to the Spaniards who have accepted them. These

bills are then duly honoured; and as not a farthing of money has passed, "the City" will declare that England has lent to Spain "a million of money." But what *has* England lent?

To answer this question, we must first see whence came the bills that the brokers bought in England. There is only one source. England has exported to Spain a quantity of goods—hardware—pots and pans and kettles to mend. And for these goods England had a right to be paid. And England has said to the Spanish Government—"We waive for the present this right of ours to be paid for these goods your people have had from us; we lend you the pots and pans, for which you may go and collect the payment." And once more we see that no man, no nation, can lend, just as no man or nation can pay or give away, anything in this world except *products*. Things, things, things—the world of economics is the world of things.

But we have yet to show where is the Clearing-house which enables the international bill to dispense with the passage of money from nation to nation. For the purpose we can show in the first place how one bill will be sufficient to settle the transactions represented in our Fig. 1. In Fig. 4 this is shown as taking place by the medium of one French bill, thus:—

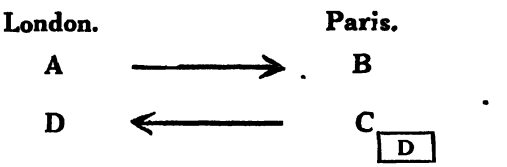
Fig. 4.



A draws; B accepts; D, through an X, buys from A, and sends to C. C presents to B. B honours. *Exeunt omnes.*

But one English bill would have accomplished the same thing, as shown in Fig. 5, thus:—

Fig. 5

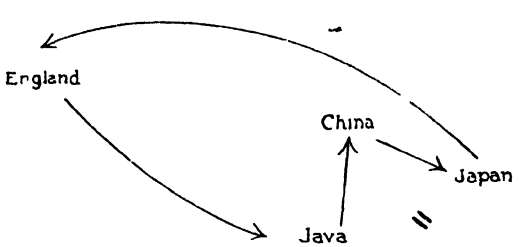


C draws; D accepts; B buys from C, and sends to A. A presents to D. D honours. *Exeunt omnes.*

Of these two methods, that shown in Fig. 5 is practised in an enormous majority of cases. Why?

London has long acted as the "Clearing-house of the World," the method of her action being shown in Fig. 6. Suppose that Java sends goods

Fig. 6



to China, and China sends goods to Japan; but that there is no ready flow of commerce between Java and Japan. If Japan had been accustomed to send goods, frequently and in large quantities,

to Java, the matter would have been quite simple:—a bill on any one of the three countries would have settled the three transactions. China, for instance, could have drawn on Japan, and with the Japanese bill have paid Java for the Javan goods; and Java could have sent on the Japanese bill in payment for the goods received from Japan. But the supposed absence of trade between Java and Japan makes this solution of the difficulty impossible; and it looks as if Japan would have to pay in gold for the China goods, and China pass on the gold to Java in payment for the Javan goods, and thus end the transaction. But this cannot be; for Java would thus get nothing but gold as result of her commerce, and would so suffer, in her trade, the fate of Midas of old. But the difficulty is got over owing to the fact that all three have large and constant dealings with England. Japan has sent a cargo of blue teapots to England, and for them has received an English bill. With that bill Japan pays China for her goods; and with that bill China pays Java for her goods; and with that same bill Java pays England for a cargo of biscuits sent by England to Java. The English bill does the whole thing; and London has acted as Clearing-house for these distant nations. But a moment's examination of our Fig. 6 should raise the question why it is an English bill, and not a Javan, Chinese, or Japanese bill that does the work, since any one of these bills would apparently effect the purpose equally well. But the explanation is found as soon as we consider the ubiquity which is the great characteristic of the English export.

It is not merely the fact that English trade is of such huge total magnitude, though that fact is indirectly concerned. It is not the high repute of the English bill for solvency, though that is a condition of its effectiveness. It is not only that the English bill is payable in gold of excellent coinage and high caratage, though that is a real contributory cause. No: the real reason is that the English exports are so all-pervading over the surface of the earth that, go where you will, you will always find there a merchant who has imported English goods, or who wants to import English goods, and who is therefore only too pleased to obtain an English bill wherewith to pay for them. This makes the English bill to be the most certainly saleable—that is, the most easily discountable - of all credit documents, and therefore the most sought after. Consequently it is the English bill that does this work, and London that is the "Clearing-house of the World." This gives to London her priceless centrality in the world's commerce, a position which, once lost, would never be regained.

Not, be it most carefully observed, the mere magnitude of her trade. If a trade of equal magnitude were confined to certain portions of the earth's surface, the English bill would inevitably lose that ubiquitous character which gives it its peculiar power. Should schemes of "Colonial Preference" come into force, so that English trade, even if its magnitude survived the shock, no longer carried the English flag into every haven of the world's waters, that power of the English bill would certainly be usurped by some rival

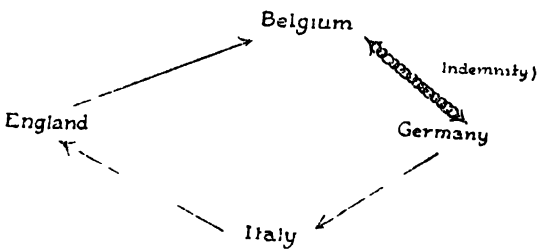
commercial centre, with consequences, commercial and financial, which I believe would be little short of disastrous.

Thus payments can only be made in things; gifts can only be conferred in the shape of things; loans can only be negotiated in things; and bills are just the instruments by which things are transferred from ownership to ownership.

Here then we have the secret of a War Indemnity. I suppose I may safely assume that we all desire, if a real victory in our just cause should give us the power to demand it, that Germany should be made to pay to the uttermost farthing for the ruin she has wrought, and, so far as forfeiture of wealth can atone—unhappily how little that is—should have extracted from her a monumental penalty for crimes unprecedented in all the history of man or beast. But my point here is that this penalty can only be exacted by the enforced surrender of her goods—of her products. Refuse her products, and you are her best friend, for you refuse to exact any penalty whatever. How she can be made to pay I have on a former occasion endeavoured to set out before an audience of the National Liberal Club, and as I have nothing to add to or subtract from that exposition, I may be forgiven if I reproduce it. The technical frills and trimmings may be complicated; but the essential features of the transaction will, I trust, be somewhat thus, for only thus can they be effective:—Suppose that a house has been destroyed in Belgium, and is to be rebuilt at a cost of £500 sterling, and the amount charged to the indemnity. Stripped of all technical

accretions the transaction will run somewhat thus (Fig. 7):

Fig 7.



Peace having been restored, and commerce taking on as much of its usual aspect as possible after the profound disturbance of the war, Italy sends silk, value £500, to England and takes in exchange an English bill. With that bill Italy pays Germany for German goods. Germany gives an order in Belgium for a house to be made for Germany at a £500 specification. Belgian contractors construct a house to Germany's order, precisely as if intending to export that house, when finished, to Germany. Only, Belgium, when the house is made, and paid for with the English bill which Germany sends on to Belgium, does not send the house to Germany; she keeps the house for herself. And Belgium having imported goods from England, pays for them with the English bill, which bill is duly honoured and destroyed. Here the course of trade shows only one abnormality. Italy, by sending silk to England, pays for chemicals received from Germany. Germany, by sending chemicals to Italy, pays for the house built to her order in Belgium. Belgium, by building a house for Germany, pays for machinery imported from

England. England, by sending machinery to Belgium, pays for silk received from Italy. And the only link missing from the ordinary commercial chain is found to be the fact that Germany does not receive the house for her own use, but leaves it in the hands of Belgium. But in all other respects the house is just a German purchase, precisely like any other German purchase. Exactly as in the case where a man builds a house, not for his own use but for his daughter on her marriage; the house will not be his house, but the expense of building it will be a charge against his estate, met by a cheque on his banking account, but in ultimate analysis paid for by—that is, received in exchange for—services rendered by him as lawyer, physician, or what not:—in a word, his products.

And here we must pause a moment to note that the protectionist alarm that the indemnity will increase Belgian unemployment finds in this analysis no shadow of justification, even from the protectionist point of view. The terror seems to be lest houses ready-made should fall from German sky to Belgian earth without employing Belgian labour—"dumped" there for absolutely nothing—"a crime unthinkable." But this is not so. A Belgian builder using capital, either his own or borrowed from the indemnity fund, and employing Belgian labour to which he pays Belgian wages, builds a house as if for export to Germany. For the house he receives his price from Germany, but he does not export the house.

I believe it cannot be too clearly recognized and understood that commodities made in a country

which receives an indemnity, and paid for out of that indemnity, are virtually exports from the receiving to the paying country, and have, upon the exchanges and money-markets of the world, exactly the same influence as such exports. Unless this, the normal position of the forces at play, is rightly comprehended, I believe that the whole position with respect to indemnities can never be understood.

Here then is the method by which Germany can be made to pay; here the way by which I, for one, hold that Germany should be made to expiate, so far as payment can expiate at all, the hideous record of crime unutterable. But it is not *a* way; it is *the only* way. Refuse her products, and you turn your back on all prospect of justice. Refuse her products, and you will leave her to recall the memory of wrongs committed, such wrongs as never before invoked the wrath of Heaven and the envy of Hell, with a complaisant smile at the impunity which has been brought within her reach by your adoption of an erroneous economic theory, and pursuit of a deluded economic practice.

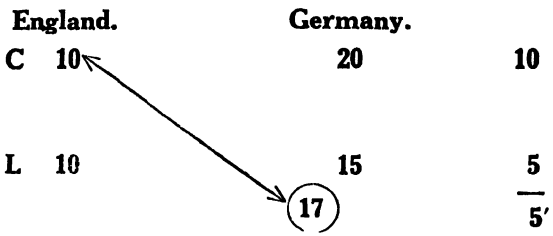
LECTURE IV

THE GENERAL QUESTION OF FREE TRADE

We are now, I trust, in a position to be able to sum up the broad, though elementary, principles of economic science upon which, as their foundation, we shall have to base the conclusions that should guide us through the tangled and difficult paths that must be traversed on our way to a happy and successful reconstruction of our economic system under the conditions incident to the restoration of peace.

We are agreed, that is to say, that economic civilization must be restored, even as that civilization began, on the lines of the precept, so simple yet so far-reaching, "You do that, and I will do this, and then we will exchange," the precept of mutual assistance and mutual dependence, as at once the means and the condition of man's physical prosperity. We have found that neither gifts nor payments nor loans can be made in any other form than that of things of the products which man can contrive to win from Nature, and to win the more efficiently the more thoroughly the mutual assistance of man and man and nation and nation has been developed and organized. We have agreed with Adam Smith that the ultimate cost to man of acquiring the things where-

with to satisfy his wants is the toil and trouble of acquiring them; so that economic progress consists in diminishing that toil and trouble consistently with increasing the amount of human satisfaction. This toil and trouble is the ultimate price, Nature's price, which man must pay for his every satisfaction; and rightly and justly the diminution of this Nature-toll is the aim of man's economic contrivance. Let us for a moment revise and restate this position, with the aid of our Fig. 1 in the exposition of the Equation of International Demand, thus:—



As here shown, England has an advantage over Germany in Cloth to the extent of 10, and in Linen to the extent of 5; and it is the difference, marked 5′ in the diagram, between these two advantages which constitutes the benefit to be shared between the two nations.

Looking at this diagram, we were at once able to see in general terms wherein the advantage lay to each side in the transaction. It was that Germany gave less labour for the same cloth, and England got more linen for the same labour. On both sides the ratio $\frac{E}{S'}$ or $\frac{\text{Effort}}{\text{Satisfaction}'}$ was altered in favour of humanity.

Now suppose the state of things here repre-

sented to have become well established as between the two countries, and let us look a little more deeply into the exact nature of the gain.

It is a well-known axiom of economic science that general values can neither rise nor fall. Since the value of any thing can be measured (with certain exceptions) by the amount of some other thing that it exchanges for, it would be obviously absurd to speak of either rise or fall of general values, since this would amount to saying that at one and the same time, everything exchanged for more of everything else. Such a statement would be on a level with the fairy tale of the king who had fifty daughters, each one of whom was more beautiful than any of her sisters. But though it is impossible that, at one and the same time, Brown should be getting more of Jones's hats in exchange for his boots, *and* Jones be getting more of Brown's boots in exchange for his hats, yet there is one shop, Nature's, at which we must all buy, paying in the sweat of our brow for the bread we eat. At this shop, toil and trouble are the currency in which we pay. Nature keeps that shop, and Nature lets us have the goods more cheaply provided we can find out how to get them. This is the Nature-toll, —the price Nature exacts for all the things we want. This may in a sense be described as a general value:—Nature's price. And that price, that general value, can be, and is being diminished, because step by step we are wresting Nature's secrets from her, and learning how to obtain more for less,—buying more cheaply at Nature's shop. And this change goes by the name of Progress.

Once more let us refer to our figure, and let us enquire what is the measure of the benefit there shown, what is its amount, and what the terms of its sharing.

England's advantage in cloth is 10, in linen 5; and the difference between these two advantages is 5. And it is this *difference* that is shared. So international trade is a process, literally and accurately, of "splitting a difference." The nature and operation of the forces by which the difference is split will call for a little more detailed examination; for we here come across an excellent opportunity for illustrating a distinction which often presents difficulties to students, the distinction, namely, between Wealth and Well-being.

In our diagram the five advantage-units are shown as being divided so as to give 2 to England and 3 to Germany. But we found that if Germany's demand for English cloth increased, if her economic happiness became more bound up in the procuring of English cloth, she would have to raise her terms from 17 to 18 and so be content, as far as material goods go, with the smaller share of the shareable advantage. Here then we find the required distinction. The more the economic happiness (Well-being) of a nation depends on the maintenance of a given series of transactions, the smaller the share of the material goods (Wealth) which the nation must be content to accept in the partition of the total advantage.

And again, let this state of things, after being long established, be suddenly interrupted, as by war. And at once we go back. England goes

back, up the supply-price curve of Increasing Return, to a smaller production, and a higher price, of cloth; while in linen, in return for her 10 units of effort, she obtains a smaller linen satisfaction; smaller by an amount equal to what Germany could make with 2 units of her labour-capital effort.

The trade shared out to us the advantages:—its stoppage restores the loss, brings back the wasted effort, the higher price, the lesser satisfaction.

"It is the maxim," says Adam Smith, "of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy. The tailor does not attempt to make his own shoes, but buys them of the shoemaker. The shoemaker does not attempt to make his own clothes, but employs a tailor. The farmer attempts to make neither the one nor the other but employs those different artificers. All of them find it for their interest to employ their whole industry in a way in which they have some advantage over their neighbours, and to purchase with a part of its produce, or what is the same thing, with the price of a part of it, whatever else they have occasion for. What is prudence in the conduct of every private family, can scarce be folly in that of a great kingdom."

These advantages of mutual intercourse for purposes of exchange being thus admitted, the question arises as to the reasons, if any, for abandoning them. And the burden of proof clearly lies upon the advocates of interference with the citizen's free choice as to where he is to look for

a market for his wares, and whence he is to draw the satisfactions of his wants. And if such interference is to be permitted at all, we still shall need to know how far it is to be carried, and on what principles it is to be limited.

Some there are who urge that if goods can be produced by those who are our immediate neighbours it is as unwise as it is unnecessary to import them from a distance, thus adding the expense of transport to the unavoidable cost of production. But in such case the plea is doubly self-destructive. Unless the imported goods can be delivered in the market, *after* paying the cost of carriage, more cheaply than they can be produced at home, there will be no need to interfere, for the expenses of carriage will have acted as a natural protection, and under such circumstances the imports will not come. And if the objection is simply to goods from a distance which might be brought from a nearer place of origin, how is it that the proposal is not to protect Dover against Newcastle, places separated by some three hundred miles, whilst protest is raised against Dover supplying herself from Calais, only twenty-one miles across the sea? Why not protect Liverpool against Manchester? Why should not Liverpool set to work cotton operatives of her own, instead of being dependent upon Manchester for every yard of calico she uses? There is in all probability coal under the hills of Kent. Why should not Kent "find work" for miners of her own instead of bringing coal all the way from Northumberland? I may be told that is just what Kent is thinking of doing. And I reply that Kent is hoping to find that her coal

can be produced more cheaply from under her own soil, and that in such case, it will be, in Adam Smith's phrase, "cheaper to make than to buy." Just so; but unless and until it has been proved that it *is* cheaper, the Kentish coal will remain undisturbed where Nature has placed it; thus showing beyond any shadow of doubt that the argument for refusing imported goods from foreign sources is political, not economic, and cannot be maintained after the economic advantage is established as a fact.

But now comes the clever man, the man who knows, a commercial man, a practical man, that is, a man whose one theory is that all theories must be wrong. And he says, "Don't listen to that person at the National Liberal Club; he doesn't understand what he is talking about. Now *I* make linen, and I know all about linen. And what you ought to do is to exclude this German linen altogether, and then I shall be able to make all the linen for the English market, and I shall find work for English hands at making English linen, and pay English wages for English labour, and everybody will live happy and comfortable ever after."

Yes, everybody except certain persons, to wit: (1) All the English consumers of linen, who will have to pay their ten units of effort all the same and get less linen for it. And further except (2) the makers of the English cloth for export who, having now only the English market, will be thrown out of work so far as cloth is concerned, and will have, if they are lucky, to get a job at linen. Now I may be reminded that, when our

Fig. 2 showed England turning from making cloth and linen to making cloth and cloth—for home and for export—the linen man had to find a job at making cloth, and it may be urged that the one change will be no harder than the other, so far as the labourers are concerned. But this is not so. For when the change was from cloth and linen to cloth and cloth, the price of both cloth and linen fell. And therefore the demand for these commodities was increased, and the number of labourers employable at making them was increased also. For in any and every industry the quantity of the commodity that can be sold depends on the price, and the number of hands that can be employed depends on the quantity that can be sold. So, therefore, when the change from cloth and linen to cloth and cloth cheapened these commodities, there would arise a demand for more hands to make them. But the reverse change, the change back again to cloth and linen, by making both of them dearer, will diminish the number employable, and thus will certainly throw some of them out of work. Thus unemployment will increase in the land. Our clever man promises to find "work" for English hands; and this promise he might, judging from past history, be able, in a way, to keep. For in 1842, when the exclusion policy was in full swing, the pauper-broken stone heap of Leeds—where they know something about cloth—mounted to 150,000 tons.

"No man," said Archbishop Whately, "ever wanted work; what men want is wages." And only an increase of produce can permanently

increase the capacity to pay wages. For productiveness is Nature's demand for men.

But some there are, like our clever friend just mentioned, who would persuade us that unless we close our markets to keep them safe for the home producers, the foreigner will let loose upon us the process known as "dumping," to the ruin of our native industries. Dumping has been defined as "the sale of goods in a particular market at prices lower than those at which the goods are currently offered in the country of manufacture." We will return to this point later. But for the present I should like to point out that during the war it has of course been our object to injure the enemy by all the means of legitimate warfare. And if unrestricted exchange is really as injurious to the prosperity of a country as our clever friend would have us to believe, then what we ought to have done for the last four years was to "dump" all kinds of goods, wheat, pork, and clothing, into Germany far below cost price, or even free gratis and for nothing. To hear some folk talk, that would seem to have been, in their opinion, an infallible but neglected method of bringing such irresistible and fathomless ruin upon the industries of Germany, and such permanence of poverty upon her people, that we need only to have extended the process a little, and supplied them gratis with everything they required, and we could have awaited the result in a peace the terms of which we could have dictated at leisure, to the vast economy of invaluable life. But this safe and certain road to victory was never, so far as I am aware, pointed out by the *Daily Mail*

or the *Morning Post.* The natural instinct of the Man in the Street was too sound. And any patriot who had tried to ruin Germany by supplying her with English goods on the cheap, would, if caught at it, have had to face an extremely uncomfortable interview with Dora.[1]

It is with justifiable alarm that one sees the tendency asserting itself in some quarters to regard the war as an opportunity for pushing the adoption -under compulsion for choice—of nostrums of every kind, including the economic nostrums which in times of peace had been wholly discredited by force of argument. And amongst them an opportunity seems to have been discerned for "capturing the trade of Germany." By all means, if this implies that we are to abandon the stupid industrial conservatism which has handed over so many neutral markets to alien enterprise. For it is only too true that in some directions foreign markets have been lost to British producers; but it has not been by "unfair" competition, but by sheer incapacity I say it with deep regret of the British producers themselves. So long ago as 1897 a Blue Book, C'd. 8449, on "Trade of the British Empire and Foreign Competition" contained the statements of British representatives living abroad in places where British goods had been supplanted by those from foreign sources of supply. It is not pleasant reading for any Briton who takes a patriotic pride in the industries of his native land. In case after case it shows how markets have been lost by crass obstinacy or

[1] It may be for the benefit of posterity to record here that the Defence of the Realm Act has been currently thus known

ingenuous stupidity. The precious "Merchandise Marks Act" which was to identify all goods "Made in Germany," and so procure orders for the British producer, has of course, as every economist knew it must, worked in exactly the opposite direction. Says the Blue Book—"A considerable proportion of the apparent increase in foreign importations is attributed in most of the Colonies to the effect of the Merchandise Marks Act. The obligation to mark foreign goods with the name of the producing country has made colonial customers aware that these goods were of foreign and not British make, and they have begun to ship them direct from foreign ports." Another correspondent, speaking of the boot and shoe trade, says—"It is the necessity for such climates of lightness and flexibility, points which English traditions combat and condemn, but of which the determined neglect has opened most of our colonial markets to the productions of the Continent and America." Again, another correspondent "Through the supineness of English manufacturers years ago the American axes were allowed to supplant the English ones owing to their greater suitability to colonial work; and they have gained such a firm footing in the Colonies that it is a difficult matter to oust them now." Great industries and small, it is the same story. "Britannia-metal spoons were made in large quantities, and the trade at one time was entirely in the hands of Sheffield manufacturers; but in consequence of their obstinacy in refusing to draw an iron wire through the handle, this trade has been entirely lost to this country."

Truly, a mere theoretical economist may well

pray for patience to tolerate these practical men. To protect their own goods they invoke the whole force of an Act of Parliament to advertise those of their competitors, and raise to the skies their protests when their advertisement takes effect. Our bootmakers produce boots well suited to the cold and wet of our climate, and refusing to listen to the bitter cry of tortured toes where the weather is dry and hot, raise plaints to Heaven, when they lose the trade, that they are ruined by unfair competition. And then the spoons! Under the name of a protective tax we are asked to submit to the imposition of an additional out-door relief poor-rate for the preservation of the trade of persons who would rather lose that trade than run an iron wire through the handle of a Britannia-metal spoon. Surely this is to carry rather far the virtue of sacrifice for a principle. Surely we may suggest that such virtue would be best exalted if the sacrifice were paid for by those who elect to incur it.

If then we can learn to leave off making what we think our customers ought to want, and take to making instead what they really do want, and so win back the reputation of English goods as really the best and the cheapest, let us by such means capture German trade or any other trade wheresoever we can. But a nation's extremity is the nostrum-vendors' opportunity. Inoculators, patent medicine vendors, and quacks of every kind, still find time to shriek for the compulsory adoption of their methods, and money for advertisements, whole columns long, in the pages of the daily press; so it is only to be expected that

those who look for prosperity in compelling us to make things dearly at home instead of buying them cheaply abroad, should be raising their heads amongst us.

So that in respect of this so-called capture of the trade of Germany, much will depend on the meaning to be attached to the phrase. Referring again to our Fig. 1, if it is meant that there is now an opportunity for making linen in England better and cheaper than it can be imported from Germany, then I would say, by all means try; and if you succeed, I shall be the first to cry, "Well done." But if you mean to ask me to pay more for my linen in order that I may say that it was made in England, though it could not be made in England but for a statute to keep its cheaper competitor outside:- then I reply, that the time of recuperation from the ravages of a terrible war is not the season to ask me to increase my expenditure upon out-door relief; that your policy is not one of gain but of loss; that you invite me not to promote the prosperity of our land, but to deepen the shadow of its distress.

But you may tell me that even when the coming peace is completed it will not be safe, for political reasons, to restore the full freedom of trade with Germany- that we must refuse to trade with her as a measure of precaution against *revanche*. Well, if Asquith, and Lloyd George, and a few more of that calibre, all assure me that this is a necessary measure for British safety, then I will submit with what cheerfulness I may, just as I submit to taxes for the building of dreadnoughts, that we may hold for ever secure the foam-lashed

frontiers of our island home. But though I am one of those who, long before the war, used the whole of my little influence to back up the policy of a mighty navy, supreme, unchallengeable, I have never denied or doubted that that navy was expensive :– a wise and necessary expense, but an economic loss. And just as peace comes not perfectly to the world until dreadnoughts are no longer necessary in politics, so, if we must injure Germany and ourselves by restrictive regulations, we therein and thereby fall short of real economic peace. It may be necessary ;—it will none the less be loss.

Still I may be told that this is all very well in theory, but it does not do in practice. I reply that this is scientifically impossible. If it really does not do in practice, it does not do in theory either. Show me what is wrong. This plea means –"Free trade is unanswerably right, but I want *my* monopoly." Honesty is the best policy—for other people. Theory is a truth to be applied to others ; practice, an error I want to maintain for my own benefit. It is therefore useless to simply describe me as a theorist ; that does not answer me. I repeat my claim a fair one in any argument on which, as in this case, grave national issues depend—that you should show me what is wrong.

So the protectionist begins again. We ought to tax the importation of any goods which it is possible to make at home, so as at once to protect the home producer, and obtain a great revenue to go towards the payment of the interest on our colossal debt. But here enters the fundamental

fallacy of a so-called protective tax. There is no such thing as a protective tax. A tax is a contribution to the revenue. Wherefore there cannot be such a thing as a protective tax, for the simple reason that if it is a tax it does not protect, and if it protects it is not a tax. Let us see. Suppose that in the presence of what is called a protective tax on French silk, an Englishman proposes to purchase a silk dress for his wife. Then of two things one. The tax makes the French silk dearer than the English silk. So the intending purchaser will either say, "My wife likes a French silk, and a French silk she shall have; hang the expense";—then the French silk comes into the country, the Government gets the tax, but the English producer does not get the order; and there is tax, but no protection. Or else the would-be purchaser of the French silk says, "The tax makes the French silk too dear; my wife must put up with the English silk." Then the English manufacturer gets the order; but as the French silk does not come in, the Government gets no tax. And in this case there is protection, but no tax. Granted that a given fiscal arrangement may operate sometimes as a protection and sometimes as a tax. But if and when and to the extent that it is a protection, then and there and to that extent it yields no revenue. And if and when and to the extent that it yields revenue, then and there and to that extent it affords no protection to the home producer. And it can only succeed in being really and thoroughly protective by failing altogether to bring one penny to the exchequer. For it is past the wit of man

to invent a protective tax. If it is a tax it does not protect, and if it protects it is not a tax. Which is not to deny that in either capacity it is always an imposition. Thus whosoever tries to persuade us that a really protective tax will bring a considerable revenue to the State, either does not know what he is talking about, or is deliberately misleading his hearers.

But still, it may be urged, we ought to tax the foreign dealer who comes here to sell his goods, and makes use of our markets. He ought not to be allowed so to do without contributing to our revenue. We must "tax the foreigner." Excellent well, but how are you going to do it? Referring again to Fig. 1, the aim is to tax the foreign vendor, the man who comes to sell his linen. Put then a tax on the importation of German linen. This will make the linen dearer. England's demand for it will fall off either to some extent, or not at all. If not at all, then obviously England will pay the whole tax herself. If England's demand does fall off, then the German linen will no longer pay for the whole of the English cloth; German money will come to England to pay for the rest of the cloth that is not paid for by the linen. English prices, including the price of cloth, will rise; and the German whom you tax is not the vendor of the linen, but the buyer of the cloth. It is quite possible to tax the foreigner; but from the protectionist point of view, you tax precisely the wrong foreigner.

Still the practical man sticks to his guns. "This is all very well," he declares, but every one knows that before the war England was being ruined by

your free trade." Well, let us see. We will take the facts for the twenty years before the war, and compare the state of things in 1893 with that prevailing in 1913. And we shall find that there is no test of prosperity and of progress that we can apply that fails to prove the complete contrary. Consider the annexed table.

TWENTY YEARS OF PROGRESS IN £ MILLIONS.

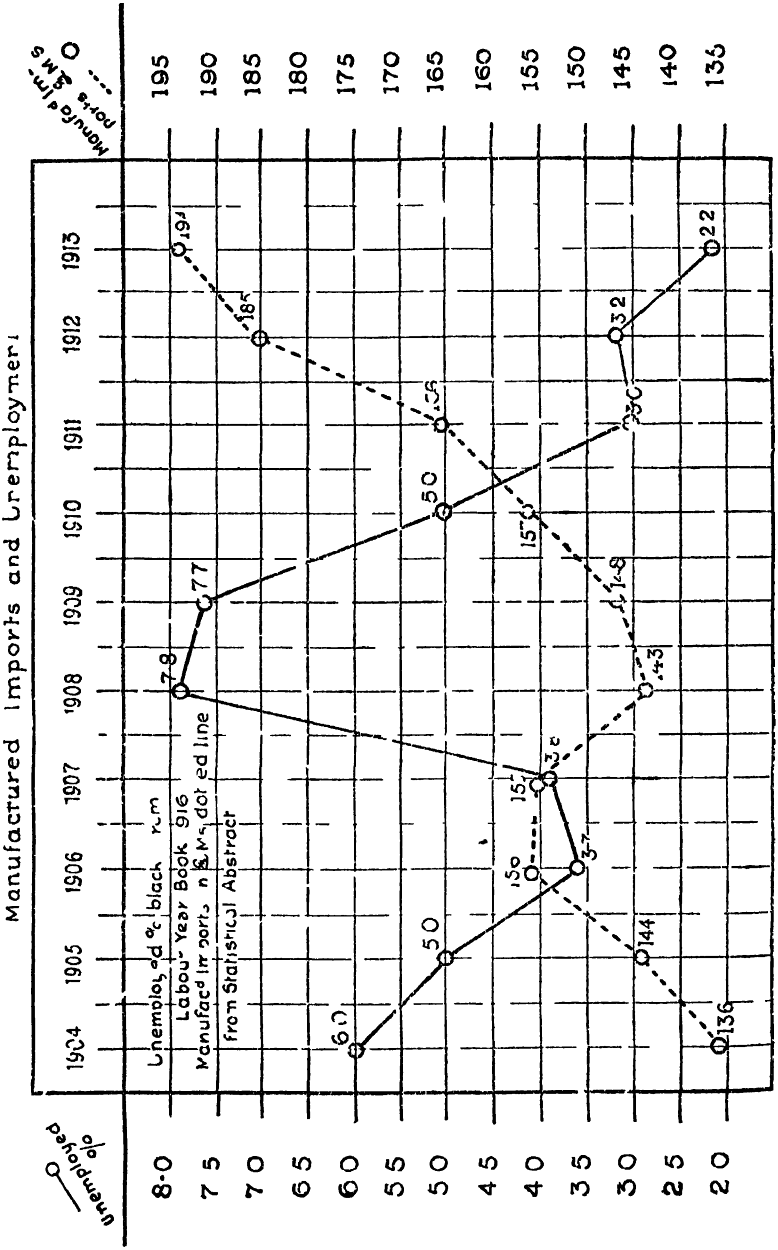
	1893	1913
	£ millions	£ millions
Deposits in Trustee Savings Banks due to Depositors at end of year ..	42	58
Capital of Provident Societies	12½	40½
Sales of goods by Industrial Societies in the United Kingdom	49	136
Government Stock in Savings Banks at end of year	6	26½
Income in United Kingdom assessed to Income Tax	674	755½
Income Tax, yield per penny	2¼	3
Clearing-house business	6,478	16,436
Post Office Savings Bank: Due to Depositors at end of year, United Kingdom	80½	190½

Here we have tests appropriate for the rich, and tests also for the poorer and middle classes. And there is not one but shows the immense advance the land has made contemporaneously with the prevalence of the free-trade policy. Of course it would be possible to urge that, vast as is the progress thus shown, it might have been greater still under some other *régime*. Possibly; but we can only go upon the ascertained results. As

Dryden said long ago, "What might be is unknown; what is appears." And one thing emerges beyond dispute: during those two decades England was not being ruined, whether by free trade or anything else. And her unparalleled contributions since 1913 to the greatest war in all history do not give us the impression that the year 1914, of evil memory, found her bowed down in poverty under the burden of free trade.

"Still, you can't deny that free trade throws men out of work." But that is just what I do deny. That men employed in a trade hitherto protected, and existing only on the strength of that protection, may, when the protection is withdrawn, have to find employment elsewhere, and may even find it difficult to do so, of course nobody denies. And here I may remark, parenthetically, that in my judgment, no community, any more than any individual, has a right to suddenly become virtuous at another's expense. And when a country has been insane enough to bolster up a decaying industry by a measure of protection, and then, in a lucid interval, removes the protection, it is the clear duty of that country to make the transition of those who are thrown out by the change to a more rational system as easy as possible, even should the necessary assistance involve some public expense. But for the present argument that is neither here nor there. When it is said that free trade throws men out of work, what is meant, and what I deny *in toto*, is that free trade leads to a greater amount of unemployment in the country as a whole:—that the working classes are made to endure harder

times. Again I refer to the figures, taking those for the decade 1904 to 1913. Those figures are represented in the accompanying diagram (p. 112). They show, for each year, the percentage of the unemployed as given in the trade union returns contained in the *Labour Year Book*, brought into strict comparison with the returns of Manufactured Imports, as shown in the *Statistical Abstract*. In every case, with one very slight exception, an increase in the manufactured imports is connected with a decrease in the percentage of the unemployed. Starting with the year 1904, the imports were £136 millions, and the unemployed percentage was 6 %. Next year the imports rose to £144 millions, and the unemployed fell to 5 %. Next year imports again rose to £156 millions, and again the unemployed figure goes down to 3·7 %. And so on all through the diagram. In the year 1907–8 the imports fell from £155 millions to £143 millions; and the unemployment figure springs up to no less than 7·8 %. A slight rise next year to £148 millions worth of imports is accompanied by a fall, also slight, to 7·7 % of unemployment; whilst in the two following years a continuous rise of imports to £166 millions goes with a drop in unemployment to 3 %, or less than half the figure for 1909. The sole exception, and that a very small one, is shown for the year 1911–12, in which a rise of imports from 166 to 185 millions is attended by a rise in unemployment from 3·0 to 3·2 %. Where is there any trace of evidence that unemployment increases when the country imports more things to consume? Of course the tendency must be the other way. There is no


Manufactured Imports and Unemployment
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
Labour Year Book 916
from Statistical Abstract
% Unemployed

buying without selling; and whoso comes here with goods to sell, brings here also a demand for goods made in England with English labour; and the more such sellers come, the more of such buyers there must be.

Let me not be misunderstood. I have dealt in this diagram with the tragic question of unemployment. I have shown some of the statistics of that question. But I would not be supposed to regard it lightly. On the contrary, I recognize in this question of the unemployed, and the relation of protection to that question, one of the gravest problems of the day, and one likely to become dangerously acute during the period of reconstruction now immediately before us. But it is just because I do know the full pathos of it, nay, more, the danger of it, that I denounce the quacks who prey on misery, the deceivers who ought to be the guides, who make the expectations of the poor to perish, who mislead the hungry, and delude the starving with the mirage of a meal.

Still our practical man is not satisfied. "Surely," he says, "if you buy British goods, you are supporting British industry. Look at the railway stations. You will find all the advertisements are of my opinion. 'Buy Blank's matches, and support British industry.' What do you make of that?"

Well, for some time past, I should have been quite glad to buy Blank's matches, or any other matches if I could get them. But that advertisement is a most insidious delusion. If it said "Buy Blank's matches, and support Blank," there would have been nothing more to be said about

it, save to congratulate it on a candour unusual in advertisements. But it means you to infer that by buying Blank's matches there is a larger total of labour rendered employable in Britain than there would be if you bought the matches imported from, say, Sweden. But this is only another form of the argument we have just considered with the help of our diagram. Sweden comes to sell matches, and also to buy woollens. And if we exclude the Swedish matches, we diminish the demand, and therefore the amount of labour employable, in the woollen industry. Thus you make both cloth and matches dearer, and the everlasting problem of the ratio

$$\frac{\text{effort}}{\text{satisfaction}}$$

confronts you again, with its terms all against you.

It may perhaps be urged that if the Swedish matches be excluded, it may be possible to set to match-making some labourers within the country who have hitherto been in the ranks of the unemployed. Then, it may be said, these men will replace the Swedish demand for cloth, so that the English cloth-makers will make as much cloth as before, and there will be men at work making matches who were formerly making nothing. But the cloth demand of such men can obviously replace only a small portion of the Swedish demand. Even while unemployed, they, or some one on their behalf, must have demanded some cloth, even if only a little. And the extra demand arising from their establishment as makers

of matches can give employment to but few of the cloth-makers who were formerly making cloth for export to Sweden. And as less cloth will thus be made, all cloth will become dearer; while, as matches will be less efficiently made, all matches will be dearer too. And all consumers, both of cloth and matches, will suffer from the adoption of the scheme. Of all possible plans, therefore, for dealing with the unemployed problem, such an one is seen to be amongst the most expensive and the least satisfactory.

Another bogey held up for the terrorizing of the free trader is the excess of imports over exports in England. But the dread of this state of things is hardly comprehensible. It is true that in 1913, the last complete year before the war, our imports of goods exceeded our exports of produce by about 243½ millions. But why not? In the first place, the excess is shown in goods only; and when it is remembered that a large proportion of our imports is due to us for services rendered —invisible exports, as they have been well named —there remains hardly any mystery to clear up. We did most of the carrying trade of the world before the war, and for this service we had to be paid. And as we have already found that no real payment can be made in anything but goods, we have here the explanation of a large part of the difference. Insurance covers another large item. But the main point to bear in mind is that, in the nature of things, the imports of the whole world must exceed its exports for just so long as the world has any prosperity left. For if trade as a whole admits of profits at all,

the merchant who sends out a cargo of goods valued at so many pounds, will and must receive back a cargo in return, the value of which exceeds the value of the export. If not, the venture has been a failure. A consignment of cotton goods goes to China, value £1,000. The exporting merchant gets back a cargo of tea, which realizes, let us say, £800. He will have contributed to the trade statistics in the direction most approved of by the protectionist; his exports will have exceeded his imports; but such a business, if persistent, can land him nowhere but in the bankruptcy court.

Now it must be understood that the reference to the prosperity of England under free trade cannot be taken as a positive argument. It is a conclusive negative; but it is as a reply, and not as an assertion, that it is of both importance and validity. Our prosperity is no answer to the man who says that we are not as well off as we might be; but it is an answer, and a final one, to the man who says we are not as well off as we were. But when the argument is turned the other way, and we ask how well off the country was under the old protectionist *régime*, we find at once that no promise of future prosperity can be founded on the memory of protectionist England. As against this record of free trade and prosperity we are invited to go back to a system which we have fully tried, and found worse than wanting. Our industries are to look back along the path of progress, nor fear the fate of the wife of Lot. And what shall we look back to? Back to times told of by the real prophets of the people, when

Tom Hood voiced the worker's plea in his *Lay of the Labourer* :—

> The harvest stack to bind,
> The wheaten rick to thatch,
> And never fear in my pouch to find
> The tinder or the match.

And more potently still when he sang the *Song of the Shirt* :—

> O God, that bread should be so dear,
> And flesh and blood so cheap.

And when Ebenezer Elliott, in a white heat of passion, was uttering the seathing denunciation :—

> They murdered hope, they fettered trade,
> The clouds to blood, the sun to shade,
> And every good that God had made,
> They turned to bane and mockery.

Back to times told of in solid history, grim and fact-dealing, of Bolton, my own native town, in 1840, of which Guizot tells us that it "was thrown into a condition of utter ruin. Out of fifty manufactories thirty were closed ; more than five thousand operatives knew not where to seek or obtain the means of sustenance. Disorder and crime, as well as misery, increased with awful rapidity. Nearly half the houses were tenantless ; the prisons overflowed ; infants died in their mothers' arms ; fathers deserted their wives and families, striving to forget those whom they were no longer able to maintain." In this same Bolton, where in one week, a hundred wedding-rings were pledged

to obtain food. And those who know our North and its superstitions know what that means. Up there it is in the last degree unlucky for a woman to remove her wedding-ring on any account whatever; and those poor pledged hoops of gold, many of them worn so thin that it must have been little enough that they would fetch, told the tragic tale of a home stripped of every article that would sell for a penny.

Such days must never come again;—"there must be no next time."

Nor must it be forgotten that the benefit of protection, should protection be restored, is of but limited scope even for the protected industry. Competition is to be feared from rivals at home no less than from rivals abroad; and should protection succeed for a time in raising above the normal the profits in a given trade, that trade will at once be invaded by a host of profit-seekers whose competition will need but little time in which to force down the profit rate to the current level. Inefficiency has not only the foreigner to dread; and the really efficient—who are efficient enough to hold their own against their competitors at home—have little to fear from foreign producers.

Another grave omission in the protectionist argument is to be found in its neglect to take account of the serious question of associated industries, which general question includes that of raw materials and finished products as a particular case. When an article of foreign origin is prohibited from entrance into home ports in the supposed interest of some home production, it will often happen—so often in fact as to be

the rule rather than the exception,—that other home industries, closely associated with it, are adversely affected. For instance, when some years ago the importation of live cattle was restricted, it was revealed to many who had forgotten, if they ever knew, that every atom of a beast is utilized in some home industry or other. To say nothing of so important a material as the hides, the horns also, and the hair, the bones, the hoofs, are the materials of endless numbers of small articles, products of home industry; the tongues are not only cured for food, but are made to nestle coaxingly in those cardboard boxes which have been conspicuous amongst the cares of our Trade Boards; whilst, as result of the prohibition, drovers and cattle-men found their occupation largely gone. And in the close interweaving of our industries, that which is a finished article to one trade is the raw material of another. So Bermondsey, where they do tanning, had to be promised an exclusion of foreign leather; whilst Leicester and Northampton, where boots are made, clamoured, not without success, for the free importation of leather as their raw material.

But I may be told that these are after all mere matters of detail, which can be adjusted in subordination to the main purpose of National Independence. With a passing protest that successful commerce, to those who really appreciate its nature, is little else than a matter of one huge complexity of detail, it is enough to reply that this "independence" is a right fool's word, foolish economically, and morally inadmissible. All sound economics must be founded on mutual aid and

the correlation of connected effort. We have admitted the advantages of division of labour; if we now go back upon that admission, the whole of economics must be rewritten.

But surely, it is urged as a final plea, there can be no wrong done by protection if all are alike protected. Protection of all must be fair to all.

And this final plea breaks down as badly as, or even worse than, all the others. You cannot do it. To all industries which by the nature of the case can be exposed to no outside competition, protection of the other industries comes as a decree of plain and simple spoliation. Where is the professional man, the doctor, the lawyer, the teacher, to look for compensation for the increased prices he is called upon to pay out of his earnings for every article of his daily consumption? You cannot tax or prohibit the importation of medical advice; yet the medical man is to pay a monopoly price for the bacon and eggs of his breakfast, and the meat and vegetables of his dinner, while even the paper on which he writes his prescriptions is to cost him an additional fifteen per cent. The elementary school teacher, already scandalously underpaid, is to have his meagre salary still further reduced in real value by artificial dearness without the smallest chance of having the price of his invaluable product—sound citizenship—raised by a penny's worth under any protective enactment. Protection of all is a physical impossibility. And besides, if the impossible were after all achieved, what the better would any one of us be for the achievement? In the important sense of buying at Nature's shop, before alluded to, we should

only have succeeded in raising general values. We should all of us be paying more in terms of labour-capital-effort for everything we consumed, and the benefit, if benefit there were, to each of us would be counterbalanced by the tribute that each must pay to other. What is the good of thus living by taking in each other's washing?

> For it's as plain as plain can be,
> With this conclusion all agree,
> When every one is somebody,
> Why, no one's anybody.

But here enters the greatest good of the greatest number. Says Adam Smith (I. x. 2): "The property which every man has in his own labour, as it is the original foundation of all other property, so it is the most sacred and inviolable. The patrimony of a poor man lies in the strength and dexterity of his hands; and to hinder him from employing this strength and dexterity in what manner he thinks proper without injury to his neighbour, is a plain violation of this most sacred property." But this principle of the poor man's patrimony—of property, inalienable property, in one's own labour,—applies all round, to rich as well as poor, to man and woman alike. Here free trade becomes a question for the masses of the people. It is amongst suffering sad humanity that the extinction of free trade would be as a light gone out, deepening the shadow that makes the toiling life so grey. By what right, I want to know, do you take from me, or tax upon me, this final property—the right to make my labour-capital-effort as productive as may be, for myself

and for the community of which I am a part, of human desire satisfied, and human need supplied? By what right do you demand that I should work for six hours in order that my want should be supplied by you, when here is one who will satisfy that want for five hours of my labour? To bring me nearer to my grave by just one hour of resultless work, with nothing whatever to show for it? Do you plead that without it you cannot live? Then describe your claim by its proper title, as one for out-door relief; and speak not of a protective system, but move for an extension of the poor-law. Do you simply urge the right of the stronger? Then the issue I will squarely try at the bar of public opinion; nor shall hand of mine be ever raised to strike the freedom-spreading British flag at the summons of the Jolly Roger. In such proceeding Government oversteps its legitimate powers; for you have no more justification for the drafting of a wicked budget than for the waging of a wicked war.

LECTURE V

RECENT ATTACKS ON FREE TRADE

So far, we have seen that the principle known as Free Trade is in full accord with the fundamental truths of Economic Science. We have examined and found wanting the leading objections made to that principle in itself. It remains to be seen whether, in view of the war or other circumstances, there is sound present reason for abandoning that principle, or limiting its acceptance in special cases. This investigation will lead us to the consideration of various recent pronouncements which have been regarded as giving advice of an authoritative character for the guidance of our future fiscal policy. No less than six of such documents, of more or less importance, and all bearing the official endorsement, have appeared within recent times, and the adoption of the recommendations therein contained has shown that the Government of the Kingdom has chosen its path after a considerable pause at the parting of the ways. Has the choice been for the best? Has the more excellent way been selected?

It may be well to enumerate the documents alluded to, and to which reference will be made in the course of the remarks which follow.

Taking them in the chronological order of their appearance they are as follows:—

1. Report of a Sub-committee of the Advisory Committee to the Board of Trade on Commercial Intelligence with respect to Measures for securing the Position, after the War, of certain Branches of British Industry. (Cd. 8181, 1916.)

2. Recommendations of the Economic Conference of the Allies held at Paris on June 14, 15, 16, and 17, 1916. (Cd. 8271, 1916.)

3. Copy of Resolutions passed by the Committee on Commercial and Industrial Policy on the subject of Imperial Preference. (Cd. 8482, 1917.)

4. Committee on Commercial and Industrial Policy. Interim Report on the Importation of Goods from the present Enemy Countries after the War. (Cd. 9033, 1918.)

5. Committee on Commercial and Industrial Policy. Interim Report on certain Essential Industries. (Cd. 9032, 1918.)

6. Final Report of the Committee on Commercial and Industrial Policy after the War. (Cd. 9035, 1918.)

Of these six documents the most important seem to be the first and the last. And a comparison of the two would lead to the conclusion that the first was highly influential in deciding much of the general tone, and many of the details, of the last. Indeed, the authors of Number 6, when framing it, had before them both Number 1

and Number 2; and the Resolutions reported in Number 2 formed an express portion of the reference to the Number 6 Committee, popularly known as the Balfour Committee. That this was so cannot but be regarded as an unfortunate error, on the economic side, perpetrated by the Government which drew up the reference, for it hampered the free discussion of the Committee, and did much to prejudge the issue, and forecast, if not almost to dictate, their conclusions. The logical order will therefore seem to be best followed if we consider Number 2 in the first place, before examining Number 1, and the final and determining recommendations of Number 6, which includes and repeats Number 3 and Number 5.

The Paris Conference met in June 1916, and drew up a number of Resolutions in French which were translated into English with some clumsiness. I pass over the fact that these recommendations were largely influenced by a condition of things which had to a great extent lost its importance shortly after the Conference had issued its recommendations, and which the completion of the defeat of Germany has now deprived of all significance. And further, it could not have been regarded as other than fair and reasonable, before taking these resolutions as binding on the Allies, and particularly on the United Kingdom, in respect of the treatment to be adopted with regard to foreign countries, to take some account of the different position of some of those countries at the present time, as compared with their position at the time when the Conference was drafting the said resolutions. In June 1916 Russia was still an

effective ally against the Central Powers, and Italy, though at war with Austria, had not as yet declared war on Germany. And the United States had not declared war on Germany until April 6, 1917. Any recommendations, it may therefore be said, which are to determine the trade relations of Britain with foreign nations on the basis of a discrimination between Allies, Neutrals, and Enemies, and which were drawn up under circumstances so different from those of the present time, may surely be regarded as out of date. Be that as it may, the resolutions are such that, though not appearing to the free-trade mind to be over-burdened with wisdom, nevertheless need much help from a perfervid protectionist imagination in order that they may bear the full meaning that has been read into them. They are divided into recommendations for transitory measures for the period of reconstruction, and permanent measures for mutual assistance among the Allies. These last the Allies are to adopt "having regard to the principles which govern their economic policy"; a proviso which might well have retained for Britain her adherence to free trade, at all events after the "temporary prohibitions or special *régime* of an effective character" against the enemy powers had passed away. But the sting of the whole thing lies in these prohibitions against the enemy after the war is over. If not only England, but all the allied powers are to have really prohibitive tariffs against Germany, so that we abandon our claim and even renounce our right to any indemnity from her, there can be no shadow of doubt that

Germany will organize, and will be driven by our own action to so organize, a commercial union of Central Europe in close trade alliance with Russia, whose present state was not dreamed of in the philosophy of the Paris Conference. Besides, these Paris resolutions were adopted before America was a belligerent in the war; and this exceptional treatment of German goods seems hardly in consonance with President Wilson's third amongst his fourteen points, which runs: —

> The removal, so far as possible, of all economic barriers and the establishment of an equality of trade conditions among all the nations consenting to the peace and associating themselves for its maintenance.

Especially when taken in conjunction with his own interpretation of it, thus: —

> It leaves every nation free to determine for itself its own internal policies, and limits only its right to compound these policies of hostile discriminations between one nation and another.

However much these dicta may be explained or even modified, it is clear to common sense that the resolutions of the Conference, calling for total exclusion of German goods, can never be carried out in conjunction with an America guided and governed by such a deliverance.

A further difficulty will arise if the Continental Allies bind themselves to such exclusion of German

goods, whilst America feels herself bound to decline to take part in any such agreement. It is not to express a doubt that America fully intends to share and share alike with her European Allies in measures mutually determined upon, when one raises the question whether this discrimination against Germany, amounting, as is proposed, to a total refusal to allow her to trade with any European nation except Russia, is likely to meet with American consent, considering that such consent would amount to a reversal of America's declared policy, as stated by America's President. And here arises a consideration of the gravest import for the British commercial man. In a former lecture I pointed out how the English bill of exchange had won its position as the central credit document of the world. That position it owes to the universality of British exports. Now if we compel the Central Powers to form a Commercial Union consisting of themselves and Russia, and if all British trade is closed to that Union while American trade remains open to it, then there can be no possible doubt that the place of the English bill will be taken, so far as a vast amount of the world's commerce is concerned, by the New York bill. There must be thousands of business men in England far more competent than I to tell what the result upon British commerce is likely to be. For my own part, I fear that there will thus be struck at the centrality, and consequent pre-eminence, of London as the greatest of commercial centres, a blow from which it is long odds that there can be no recovery. To this point I shall recur; for I cannot but fear

that the position of the English bill is threatened by more than one of the modern protectionist proposals.

I turn now to the consideration of Document No. 1 upon our list, chronologically the first to appear. This Report of a Sub-committee of the Advisory Committee to the Board of Trade was in effect the battle signal, calling on the Protectionist host for close engagement with the forces of Free Trade. To my own great regret, the challenge was never taken up; the protests of a faithful few were disregarded. It was all too lightly said that "Free Trade in England is in no danger," and the case was allowed to go by default. How strong that case was and is, nevertheless, we will proceed to consider.

The Report deals with eleven branches of trade, or really with twelve; the Hardware industry being too late with its evidence to be included in the original dozen, and the Magneto industry being afterwards added to the Committee's reference, and being included in the findings of the Report. Witnesses were heard by whom complaints were lodged and remedies asked for in respect of the various ways in which Government assistance might be given to the various branches of industry with which those witnesses were concerned, and with which the Committee consequently deals. And those complaints and methods of redress are dealt with under separate heads, thus: —

1. *State-aided Scientific Research* is asked for. We hear that "the value of scientific research, and the desirability of Government assistance in the promotion thereof, was generally recognized,"

Now there can be no difference of opinion as to the value, and even the necessity, of a closer combination of scientific research with the management and leadership of our technical industries. But it would have greatly added to our satisfaction at this accession of interest in scientific investigation if we could have been told of at least some small effort on the part of the industries concerned to help themselves in the matter. Scientia as the spouse of Vulcan has been ever a neglected wife. Even while the Committee was sitting the press was justly upbraiding the employing firms with their neglect of scientific research. "Not five firms in Britain," wrote the *Observer* on March 5, 1916, "employ a chemist of their own." And the Committee itself seems to support the reproach, though in guarded fashion. "It was admitted that British manufacturers and workmen have not always shown themselves in the past sufficiently appreciative of the value of scientific investigation into industrial problems, or of technical training." Most of what we hear of as being done was done quite independently of the trades themselves. We hear of valuable work in glass by the University of Sheffield and the Institute of Chemistry, but if the glass manufacturers have done anything of importance to advance themselves in this respect, the Committee fails to inform us of it. The Manchester Institute of Technology, which has done much valuable work on the subject of paper, has "inadequate financial resources" and "is stated to exercise only a local influence, and not to be utilized by the trade generally." Yet paper wants this obvious

duty of research to be carried out for it by the Government at national expense in almost every possible department of the industry,—"in parchment making and aniline dyes, paper coating and resin size" :—though the Committee did not embrace the opportunity of singing the verse. And the Birmingham jewellery trade wants Government research into "the production of semi-precious stones." Now I hold as strongly as any man that research should be endowed by Government liberally—lavishly if you please—but surely we may ask that Government funds be devoted to worthy objects. Endowed research by all manner of means for better steel, and more adaptable aluminium; but when the research is to rise to the giddy heights of "a ring that looks like a ruby" I cannot avoid a lingering desire that such research be paid for by the trade concerned.

Nine-tenths of the pleading for state-aided research sounds like the peasant's cry to Hercules, and should justly meet with the Hero's answer —"Put your own shoulder to the wheel." Exceptions there are, many and honourable. Lord Leverhulme at Port Sunlight stands high amongst these, and the School of Pottery at Stoke-on-Trent must be mentioned with honour. But take the country through, and we have sadly to admit that the scientific prophet has but little honour in it. We cannot easily forget the advertisement for a University chemist with an Honours degree to serve a firm at 40s. a week—probably less than they would venture to offer to a Trade-unionist plumber's assistant, engaged to wash out the aforesaid chemist's test-tubes for him.

Truly, in the Temple of Commerce there is opportunity for the worship of Science—at the altar of The Unknown God.

In this section of the Report there is this much at least upon which we may congratulate ourselves, that it has nothing to do with economic war after war; no recommendation of exclusion of enemy goods or even of ideas that strive into the light in enemy countries, but instead only the highest and most laudable kind of competition, or rather emulation,—a worthy race in which the prize is the noble repute of having added most to the productive or want-satisfying powers of man.

2. Amendment of the existing Law as to *Copyright, Patents, Trade Marks, and Merchandise Marks.* Here, in respect of Copyright, the Committee recommend that our law should be assimilated to that of the United States; not, it would seem, from any admiration of that law, but because it is found to be inconvenient to the holders of English copyrights. For by United States law, books copyrighted in both countries have to be produced in the States even if for sale in this country, otherwise they hold no copyright in the States. One would have thought that some effort might have been proposed for the purpose of getting the States to amend their law; but as this is not proposed, it would seem that the next best plan to commend itself to the Committee was to render our law as inconvenient to the States as their law is to us. But at this date America had not yet entered the war.

As to Patents, many suggestions were brought

before the Committee, but the resulting recommendations are but slender, amounting to little more than a plea for uniformity throughout the Empire. Of course, it might be possible to refuse all patents to Germany; but the Committee, to their credit, make no such recommendation. Such a course would obviously only play into the hands of the German producer; for Germany would similarly refuse patent rights to British subjects, and as a result, their producers, with no patent dues to pay, would undersell our patentees, and all British producers who paid them royalties, in neutral markets; and the trade in such articles would become a gift for Germany.

But as to Trade Marks, the Committee and their manufacturing advisers have learned nothing and forgotten nothing. In spite of the bitter cry from the Blue Book on foreign competition in neutral markets quoted in a former lecture, the Committee insist that "all German goods imported into the United Kingdom should be required to be marked with an indelible mark "Made in Germany"; and "such marking should be in all cases on the actual goods, and not merely on the package." For that recommendation the German Government should lose no time in passing a vote of thanks to the Committee.

Passing on from these suggestions of the witnesses and the recommendations of the Committee upon them, we arrive at the essential portions of the Report—those dealing with proposals for plain downright protection. We read without surprise that "practically all the representative firms and associations consulted by us asked for a measure

of protection." The details of the protection asked for are given in the body of the Report, Section 55; but the recommendation upon these proposals, No. 15, extends only to the protection of War goods, and of the so-called Key Industries, with Imperial Preference, and preferential trading with those who have been our allies in the war, and the prevention of dumping. But then follows the gem of the whole Report. Let us quote:—

> "In view of the following considerations:—
>
> (*b*) that the present high direct taxation tends to raise the rate of interest on money, and cheap and abundant capital for the employment of their labour is of the greatest importance to the working classes, it will be necessary to impose some widely spread import duties, and we are therefore prepared to recommend that a larger proportion of the Revenue should be raised by reasonable import duties. We are of opinion that such import duties would go a long way towards satisfying the requests for special protective treatment for the industries which we have had under consideration."

It would be difficult to find anywhere an equally small number of words containing an equally large amount of economic error. Here we have import duties which are to satisfy the request for protective treatment, and are yet to raise a larger portion of the Revenue. This, as we saw in our last lecture, is the fundamental fallacy of the protectionist position. A protection is to add

to the Revenue. But "if it is a tax, it does not protect, and if it is a protection it does not add to the Revenue." The more it adds to the Revenue, the less will it satisfy the requests for protection. Does the Committee deliberately intend to feed our industries with the Dead Sea fruit of revenue-producing taxes?

In this same Section 15 of the Report we find recommended the protection of "manufactured articles which are of vital importance to the national safety, or are essential to other industries." Two separate things are here included. The protection of war material can without hesitation be conceded now by free traders, even as that of gunpowder and saileloth was conceded by Adam Smith. But one remark there is to be made. The cry for the protection of war material is an admission in set terms, and your adoption of such protection will be a confession in far more eloquent deeds, that you have failed to attain the object of the war. This war was to end war. And if the whole course of our industries is to be reversed, and England turned back from the free-trade path of progress in order to make sure of heaping up enough munitions for "the next war," —well, it may be necessary and it may be wise, but it proclaims the absence of belief in the permanence of peace. Personally, I never have shared in any such belief, save in so far as sufficient force is at hand, ready to be exerted against the disturbers thereof; so in consenting to exceptional measures for the conservation of sufficient supplies for such purpose, my withers are unwrung. But I protest, even while consenting to exceptional

measures for this national safety, against the kind of exceptional measures recommended. Inasmuch as, in my view, such measures must at best involve the country in expense—a wise and necessary expense if you like, but all the same an expense—then such provision should be made by the nation at the national cost, and not by private and protected firms for private and protected profit, bounty-fed.

With the exception of a recommendation against "dumping" we hear no more of definite recommendations made by the Committee for definitely protective enactments. But in the body of the Report we read of pleas for most extensive and elaborate protection of industries that have nothing to do with preparation for war. And this is the real crux of the whole position; for here is confessedly the plea of the less efficient to be maintained in their less efficiency. The strong need no protection from the weak. Nor, as we shall soon see, is the petition honestly urged. Claiming to be for the damage of *enemy* trade, it really seeks protection against *all* competition, whether enemy or not. Let us consider some of these claims, the conditions under which they are urged, and the nature of the claims themselves.

First recalling the statement made by the Committee (Section 48), that "practically all the representative firms and associations consulted by us asked for a measure of protection," let us look at the claims of some of these firms as these firms have made them.

Paper asks for 15 % *ad valorem*. But in an early section of the Report, Section 4, we find a

table showing the value of the imports for each of the trades concerned in the year 1913, the last before the war, and therefore the latest date from which after-war probabilities can be inferred. In that year the total value of imported paper was £6,003,000, and of this amount £1,559,000 came from Germany -not much more than 25 %. The other sources of supply were, we are told, Sweden and Norway, Belgium, the Netherlands, Russia, Newfoundland, the United States, and France. But the 15 % is to apply all round: so that, regarded as a plea for help against an *enemy* rivalry, it is unfairly urged to the extent of 75 % of it. And this by a trade which, as we have already been informed (Section 7), has appealed for Government scientific research to help it, while doing nothing for itself, and failing to utilize what has been done for it by the Manchester Institute of Technology.

Plate and Plated Ware also calls for a 15 % duty; but only 36 % of the imports are German, and 49 % are from the United States. If our Allies are to be exempted from the action of the protective measures, it is not very easy to see where the great benefit to the plated goods trade is to come in.

Toys. If these are not "mechanical," they only ask for 20 to 30 % *ad valorem*; but if they are "mechanical," they are to come under "an absolutely prohibitive rate." So the mechanical nursemaid with the mechanical perambulator, the mechanical jinricksha man, and the mechanical boxers, who mechanically pommel each other in glorious defiance of the Queensberry rules, are

all to vanish from the nursery floor. Unless, indeed, it be the nursery floors of the rich who can pay the fancy prices which the English producers, sheltered behind their "absolutely prohibitive rate," can extort from the parental affections of wealthy grandfathers. In the name of the sovereign democracy of babyhood, I protest.

Glassware. Here we have different rates proposed for different kinds of glass. For table glass and lighting glass the claim is for a total prohibition of German and Austrian glass for a period of three or five years; and then a duty of 33⅓ %, which it seems is to be perpetual. Now this is a good crucial case. The proposed total prohibition for a fixed period might possibly be only intended to give the British maker a start;—a piece of that "initial protection" so dear to the hearts of some who delude themselves with the idea that they are "moderate free traders." But the *permanent* 33⅓ % is a confession of a permanent inferiority which you and I are called upon at once to tolerate and to pay for. It is a shameless cry for out-door relief. I challenge the fundamental justice of any such claim. Here is a set of table glass which I want to buy. In a certain quarter I can get it for £5. But I am to be made to pay £6 13s. 4d. for it in order to bolster up a British trade which otherwise will fail. Why? By what right do you make me pay £6 13s. 4d. for five pounds' worth of goods? If there is one here who will satisfy my human desire for table-glass for £5, where is the justice of the other £1 13s. 4d.? If I can earn the £5 by twelve hours' work, by what right do you demand from

me that I work for sixteen hours for the privilege of having my want satisfied by you in particular? It is sheer highway robbery, and worse. For the highwayman of old demanded my money *or* my life. The modern protectionist has improved upon the formula, and demands my money *and* my life, or at all events a considerable slice of it.

And here again let it be carefully noted that this extra £1 13s. 4d. is not to be revenue for the benefit of H.M. Exchequer. If any part of it be so, it has failed of its purpose; for the extent to which the $33\frac{1}{3}$ % yields revenue is the extent to which it affords no protection, since it is the extent to which the foreign glass is still coming in. No, it is only effective as an amount which the British maker is empowered to charge me over and above what his goods are worth. And the whole of the £1 13s. 4d. goes straight into his pocket. A poor-law or a piracy; call it which you will.

But if the sample tells us what is in the barn, the unanimity with which the trades that were examined have called for protection goes to show that nothing short of a general tariff will satisfy the cravings of our manufacturers, and at once we are let loose in the bewildering chaos of the old protective duties. What this must have meant in worry and perplexity to the British merchant, and even to the ordinary private citizen, in the early years of the nineteenth century can be gathered by reference to the guide-books to the tariff regulations which were then published, and had to be consulted by any Englishman who wanted to keep himself on the right side of the

law, and out of trouble with the Customs. Such a work is the once indispensable "Steel's Tables," of which "the second edition, very considerably improved," was published in 1801, at the price of five shillings. The book is a wonderful record of the farrago of complicated absurdity wherewith the protection of those times could make us miserable. Commodities are arranged in alphabetical order, and against each one is recorded, in three separate columns, the corresponding amount of Old Duty, Present Duty, and Drawback. Instructions for the use of the book are given in a preface, showing how to ascertain the position of any given commodity in face of the law as to its importation.

> "Thus suppose *apples* brought from American States, in a British-built ship, they pay 2s. $6\frac{16}{20}$d. per bushel; but, in an American ship, they pay not only that duty, but 10 per cent. on 2s. 4d. (the Old Duty), being $2\frac{16}{20}$d. This, therefore, is the principal use of the column of Old Duty."

This must have made it *quite clear*! But suppose you wanted to import some tennis-balls. Under "Tennis" you find nothing. Under "Balls, tennis," you find "not import. *for sale.* See *Andirons.*" Turning to "Andirons" in the index you at last hunt to earth your real instructions as to the tennis-balls you want, and you read—

> "Andirons, tennis-balls, and other articles hereafter enumerated in the alphabetical arrangement, and referred to this, (provided

> they do not fall within the denomination of French or Dutch hardware, cutlery, glass-ware, works of iron, steel, copper, or brass, saddlery, porcelain, earthen-ware, pottery, cabinet-ware, turnery, or woollen manufactures, all of which are admitted; see *France* and *Holland*,) are not importable *for sale*, except made in Ireland, taken on the seas, or wrecked, on penalty of forfeiture: 3 Ed. IV. c. 4."

And so you will quite understand the position about tennis-balls.

But the book is almost inexhaustible as a store of the quaint absurdities into which a community is bound to be led when once it stands committed to the task of working out a detailed protectionist tariff. Lobsters, we learn, are importable entirely duty-free; as also are turbots, provided they be imported *as lobsters* -an exquisite example of the legal fiction, reminding one of the Station-master's instructions to the new porter as to charges for the conveyance of live animals- -"Cats is dogs, and rabbits is dogs; but a parrot is a hinsec." The difficulties of classification are endless. I have already alluded to those arising from the fact that the raw material of one industry is the finished article of another. But even the direct decision is not always easy. When an Egyptian mummy was imported for an English museum, English judges had to solemnly decide whether the said mummy was a raw material or a finished article.

Here then we stand as to industrial protection.

It confesses defeat in war, and an inferiority in the arts of peace.

But there has been another Committee—The "Committee on Commercial and Industrial Policy," commonly known, from the name of its Chairman, as Lord Balfour's Committee.

This Committee issued several interim reports, but as the final report sums up these its predecessors, it will be necessary here to deal only with the Final Report. And in that final report we have measures recommended in favour of—

Colonial Preference;
Anti-dumping Legislation;
A twelve-months' exclusion of German goods;
Maintenance of so-called "Key" industries.

Of these, the first, Colonial Preference, is in a curious position. Mr. Joseph Chamberlain, in the course of his "raging, tearing propaganda" for Tariff Reform, did manage to give us one thoroughly sound piece of economics when he said that for Colonial Preference you *must* tax food. He might with perfect truth have gone further, and added raw materials. But now we have the declaration of our Prime Minister that we are to have Imperial Preference but no taxes on food. If there is to be no taxation of extra-imperial mutton, or corn, or wool, or timber, it is hard to see where the preference to New Zealand, to Canada, to Australia, is to come from. So that while the Committee has needed many recommendations for securing protection of our industries, the one recommendation in favour of Colonial Preference has been sufficient to threaten England

with the reconstruction of the whole edifice of agricultural protection. Enough for the present to say that it was agricultural protection in particular which brought England into the awful state of misery which we had to endure in the Hungry Forties.

But possibly we shall hear that the fiscal ingenuity of the present Government has risen to a solution of this problem by the sixty-shilling guarantee to the British farmer. Now this may be an Imperial preference, but it is not a Colonial preference, and it most certainly *is* a taxation of food. For the subsidy on the loaf has got to be paid for; and whether it is paid for over the baker's counter or in the taxes collected by the revenue officials matters nothing so far as the fact of taxation is concerned, though it may make a good deal of difference as to who pays.

At the very best, Colonial Preference is a sacrifice of the greater to the less. If we go back forty years, so as just to avoid disturbance of the statistical tendencies by the effects of the Franco-German war of 1870, and divide the subsequent period according to the ordinary quinquennia, we have the following results, comparing the average of the British and Irish Produce-Exports in £ Millions according as the destination of those exports was Foreign or Colonial:

Quinquennium	Foreign	Colonial
1876–80	66·7	33·3
1881–85	65·0	35·0
1886–90	65·6	34·3
1891–95	66·8	32·2
1896–1900	65·9	34·1
1901–05	62·9	37·1
1906–10	66·7	33·3

Here we have the record of thirty-five years of commerce during which the proportion of Colonial to Foreign destinations of our exports has remained practically stationary. To have made their markets of first importance to us they would have had to maintain for ever a rule of producing and exporting nothing but raw materials. But in their own free discretion they have gone in for industry and the protection of their industries; and even if they would, it is doubtful if they now could, drop their tariffs. And if so, then the only preference the Colonies could give to Britain, and indeed the only concrete proposal which, so far as my knowledge goes, has ever seen the light, would have to take the form, not of remitting the duties hitherto charged on British goods, but of raising still higher those against the foreign producer. But here another consideration at once crosses the track. Another system of discrimination must be set up for the benefit of our Allies. The course of events during the more recent months of the war will have made a preference war between Canada and the United States simply unthinkable. Yet United States goods are foreign goods. So we shall have to have not two, but at least three grades of protection -for the Empire, for Allies, and for Enemies. Here is a magnificent opportunity for some one of literary and statistical gifts to draw up the Twentieth Century Edition of Steel's Tables. If he sets about it at once, he may perhaps have it ready before the twentieth century has expired.

And then we come to Dumping. This the Committee generally denote by the phrase "unfair

competition." I wish my tradesmen would thus unfairly compete and dump their goods on me. But if dumping on our shores is so profitable to the foreigner, why do we not also dump on his, to earn a similarly honest penny? The answer is that we do. For it is easier for a free trade country to dump than it is for a protectionist country to do so. Take an example. Suppose that in free-trade England a man could make for Country X a thing, or a consignment of things, for £100 *c.i.f.* Country X has a protective duty of 30 % on that thing, the 30 %, be it observed, being defended by its advocates on the ground that nothing less would preserve the industry to the home producer in that country. The price in X is therefore £130. Now if the Englishman finds some of the things hanging on his hands, he need only lower his price by, say, 2%, to £98, which with the protective duty makes it £128, and he can undersell in the protected market. Whereas the protected maker must come down from £130 to at least £99, a reduction of nearly 24%, before he can dump in England. So that, in a dumping match, the betting is all on the free trader. It remains therefore for the Balfour Committee not merely to call for tariffs as a remedy for dumping, but to show us how these tariffs, if adopted, would work the desired reformation. Here is a chance for the practical man to confound the theorist.

While on this subject of Dumping, I may perhaps be permitted to deal with the following problem, which a friend of mine sends to me with the statement that it was once "fired off

at him by a Tariff-reform Lecturer." I did not myself hear the lecture; but I quote the conundrum exactly as it is given to me, thus:—

> Germany employs, say, 5,000 people, at piece rate, to make 100,000 of a particular article, at a cost of 4d. each, which she sells to her own people for 6d. each. She develops the industry, and employs 7,500 people to make 200,000 of the same article, which by the law of increasing return, now cost her 2d. each. She satisfies an increased home demand for 150,000 of the article at 4d. apiece, and dumps the balance of 50,000 on London at 2d. apiece. Thus she is not only better off on the increased production despite the dumping, but she has afforded work for 2,500 more people, and the whole 7,500 are relatively better off. At the same time she has queered the British industry.

So far the Tariff Reformer. But there are many lines of objection. In the first place it would be rather a strong example of the benefit of increasing return if the simple doubling of the output reduced the expenses of production by 50 % per unit. But as this is not impossible, we will suppose it to be done. In the next place we are not told the price at which the article could be supplied by the British producer whose industry is to be "queered." This is a fatal omission in the argument, because the British price must have been at most (neglecting farthings for clearness' sake) 5d., or the German producer at 4d., plus, say, 1d. for carriage, would have been able to compete with him, under the original circumstances, without any dumping at all. So that, if the German dump is to be excluded, and I am called upon to pay 5d. for an article which the German now offers me for 2d., I am made to spend $\frac{3}{5}$ of my

money in this regard in order to protect the English producer. I make no imputation against our tariff-reform lecturer; he argued his case, I dare say, in all good faith. But it is an unhappy characteristic of the tariff-reform proposals that they rarely inform us of the amount of expense which their adoption would involve. And $\frac{3}{5}$ of the total price is a fairly large sacrifice to call upon me to make.

On the other hand, the English price might have been as low as, say, 3d. in England, and would have been 4d. in Germany if the Germans had not been fools enough to pauperize the German producers to the tune of 2d. per article, by means of protective measures against the English supply. So that the German protectionists have victimized their own people to the extent of charging them 6d. for a 1d. article in the first place, and 4d. for a 2d. article in the second place in order to make England a present of 25,000 4d. articles for 2d. apiece. Why should England refuse the present?

And *how* is England to refuse it? No one, so far as I know, proposes to send the articles back to Germany on the ground that they are offered at the cheaper price. Shall we then have a duty on the importation of such articles, raising their price to the English present level? If so, this will maintain the English producer in his present price, and prevent his ever being compelled to lower it by *any* kind of foreign competition. All the British producers of the article will have had a monopoly made for them by the British Government—a ready-made "corner"; and will be able to agree on a monopoly price which they never

need lower, so long as the corner lasts, no matter how much the expenses of production go down. The workers will obviously claim their share, in the shape of guaranteed employment at high wages; so that not only the capitalists, but the workers also, will be enabled, by express government action, to levy a tribute on the rest of the community.

In this connection it would be interesting to learn the precise meaning our lecturer attaches to his phrase "Germany employs." The article is not said to be the subject of a German Government monopoly. We have, then, to do with a German firm, subject to the competition of other German firms. Schmidt in the first place made 100,000 at 4d., and sold them at 6d.—a profit of 50 %. What were the other German firms about to let him? And in the second case, he makes 200,000 at 2d. and sells three-quarters of them at 4d. and the remaining quarter at 2d; a profit of 75 % on the whole. Still why no German competition in pursuit of this immense profit? Or why no strike of the German hands when the firm was thus coining money?

And once more, I want to know what the article was. It may have been an article intended for further productive industry here, e.g. watch-glasses, or the so-called tin plates. If so, the industry dealing with it may well have been benefited, or even saved, by the dumping. This has actually been the case before now in respect of the tin-plate trade.

And when we hear that the process has "queered the British industry," our tariff reformer, with

great ingenuousness, has quite correctly inserted one little word, the word "the," whose presence is fatal to his argument. It may be admitted that, for the moment, *the*, or *this*, British industry may have been somewhat embarrassed, or queered. But British industry as a whole—British industry without the "the," will not have been so queered. Because, when the German producer dumped the 50,000 twopenny (e.g.) toys upon London he took something in exchange for them which otherwise he would not, because he could not, have taken. In dumping a supply he dumped also a demand; for there is no selling without buying. No very great matter, this extra demand, I must admit, amounting as it does to an additional 100,000 pence, or £416 13s. 4d. on the top of the £80,411,057 of our exports to Germany, if the transaction took place in 1913. Again another example of the tendency of tariff-reform apologetics to exaggerate matters of microscopic dimensions into national disasters.

It would thus appear that, taking the whole proceeding *as a whole*, the results are beneficent rather than otherwise for both England and Germany. For I, an Englishman, gets an article for 2d. which my own people make for me for something between 3d. and 5d. And Germany is better off in that her people, owing to the benevolent action of the Law of Increasing Return, get for 4d. an article which formerly cost them 6d.

And lastly. It was a manufactured article that was dumped, having been produced, we are told, under Increasing Return. The German producer, therefore, must have got his materials from some-

where. Most likely from England, or some part of the British Empire. And if you stop him at it, you diminish *pro tanto* his demand for such materials. And though it is hardly likely that the producers of the said materials will notice the difference, yet we may safely conclude that if the proposed restrictions ever grew to have real effects, so that the demand for, and the price of, our lumber, our iron, our wool, or what not, suffers real diminution, our Tariff Reformer may rest assured that it will not be long before he is definitely informed that such producers have entirely ceased to love him.

Next, we hear of "key industries," or "pivotal industries" as the Committee also calls them. But the difficulty here is to know what these are. The key commodity of to-day was not so fifty years ago, and may not be so any more after a far shorter period of future time, so rapid now is the pace of industrial and scientific change. Sir Hugh Bell, in the *Economic Journal* for March 1916, points out that the key industries are always changing. To take the example of dyes. It is proposed to "capture" this industry from Germany, not, be it carefully observed, by making dyes more cheaply in England than Germany can make them, but by making it worth while for English producers to make them by the offer of a higher price, secured to them by a protective duty. Good. Then dyes are to be cheap in Germany and dear in England; and the English producer of cloth and printed calico will find it impossible to compete with the German producer in neutral markets, since the German, aided by

a cheaper essential material, will undersell him every time. If this proposal is thoroughly successful, we shall preserve the dye industry in England, and destroy the industries which use dyes. The ultimate result would seem to be that England will now make the dyes, and German textiles will use them. Yorkshire and Lancashire will of course rise to the bait, and the dyer's hand be indeed subdued to what it works in.

We have reserved to us the crowning absurdity for the last. All German imports into England should be prohibited for at least a year, if the recommendation of the Committee is to be accepted as our guide to policy.

Now in certain quarters it has been a fashion, unrebuked in the Protectionist press, though one of the most foully slanderous instances on record of —"No case, abuse the plaintiff's attorney," to describe the free traders as "Pro-Germans," or even "Agents of Germany." Let us look at this proposal in this light -a procedure of which the Protectionists cannot complain, for it is their own.

If we follow this advice, are we likely to become either more able, or less likely, to engage in further war? All our commercial treaties, with their most-favoured-nation clauses, would go by the board. We shall lose the neutral trade, and Germany will get it. German "semi-manufactured" goods will go to neutral countries to be there "finished" or "examined," and come on to our markets, qualified as neutral products, thus adding to the cost that we must pay, the profits of another middleman. It has already been stated in the August issue of the *Financial*

Review of Reviews, that the Germans are appointing agents in Spain to receive there German goods, relabel them as "Made in Spain," and send them on to us. It is surely obvious how such an arrangement would help instead of hinder the development of a Middle Europe Commercial Union which could hardly fail to be a benefit to Germany, and an obstacle to English trade.

But the worst is not yet. The proposal, if adopted, will work out as the very best thing that can be done for Germany in German interests. For it will be not merely to waive all claim to any German indemnity, but to actually forbid and prevent the payment of any. Once more our fundamental fact of all economics. Payment can only be made in the form of things. If you will not take commodities you refuse payment. So the pro-Germanism is all the other way. *I* want Germany to pay pay to the uttermost yard, the uttermost ounce. I want her products, for her products are her only possible payment. If you refuse to take her products, or the products of other nations bought with German products, you are the best friend she can ever hope to meet. Unless German industries recover in the coming times of peace, Germany will not, because she cannot, pay a stiver. It is in vain that you say "Lay hold of her customs." Unless Germany *ex*ports, Germany cannot *im*port; for there is no buying without selling, and there will be no customs to lay hold of.

Wring the neck of the Prussian eagle, by all means. But I want the German golden goose kept alive, because I want the eggs for Belgium,

and for the others who have been so foully wronged by German fiendishness. This is no friendliness to Germany. We have not only to compel, we must also *enable*, Germany to pay. Pay by appropriating the goods in her warehouses, which we in our turn can pay for quite honestly, *in German paper*. Every German might have all his possessions confiscated, and himself put on rations, and made to work till the German debt to Belgium and the rest be paid in full. German land, labour, and capital, should all be exploited in the interests of the indemnity.

Just as a false economic, if adopted, will be but a renewal, not a termination, of the war, and a practical abandonment of all penal justice for our enemies and commercial justice for our friends, so it is only along the straight and narrow path of sound economic science that either kind of justice can be sought and found.

LECTURE VI

ECONOMICS OF A LEAGUE OF NATIONS. FINANCE AFTER THE WAR

In my last two lectures I dealt with the question of Free Trade. That is to say, in Lecture IV I endeavoured to state the general principles on which that great system, the foundation, as I believe, of England's recent prosperity, is based; and in Lecture V to deal with the attacks to which it has recently been subjected. To-night I pass to a different subject, or rather to two different subjects; firstly, the economic aspects of the proposed League of Nations, and secondly, to the financial conditions which will prevail during the early lifetime of the coming peace, the early lifetime of what we all hope will be a lasting peace.

Here again I wish to forestall an objection. Speaking here as an economist, I have nothing to say on the strictly political side of the question as to a League of Nations in itself. I see that the proposal has received the approval of some of the master minds of political thought, including Viscount Grey, President Wilson, and above all Mr. Asquith, who, ever since the far-off days when in the Oxford Union I did my little best to fight on his side in the splendid struggle which he made against the overwhelming Tory majority of that

interesting, if somewhat immature assembly, has been my natural political leader. And, politically, that is enough for me in such a question as this; for I feel that the political knowledge and experience of these men are so vastly greater than my own, that my duty ends with trust. It is only on the economic side that I venture to enter a *caveat*, and to hint that in my judgment, too much confidence is being placed in the efficiency of economic forces, for the operations of the League.

In this, as in all such cases, it is necessary, before criticizing a proposal, to assure oneself of the facts of that proposal by reference to the most unimpeachable authority. In accordance with this principle I shall refer, for statement of what is meant by the League of Nations, and on what forces the hopes of its success are founded, to a pamphlet on "The League of Nations" by Viscount Grey of Fallodon, recently issued by the Clarendon Press of Oxford. Three passages in that pamphlet run thus:

> (1) A League such as he (President Wilson) desires must include Germany. (Page 8.)
>
> (2) The economic pressure that such a League could use would in itself be very powerful, and the action of some of the smaller States composing the League could perhaps not go beyond economic pressure, but those States that have power must be ready to use all the force, economic, military, or naval, that they possess. (Page 9.)
>
> (3) Individuals in civilized States have long ago accepted an analogous limitation and

> obligation as regards disputes between individuals; these are settled by law, and any individual who, instead of appealing to law, resorts to force to give effect to what he considers his rights, finds himself at once opposed and restrained by the force of the State—that is, in democratic countries, by the combined force of the other individuals. And we not only accept this arrangement, but uphold it as essential to prevent oppression of one by another, to secure each person in a quiet life, and to guarantee to each the greatest liberty that is consistent with the equal liberty of neighbours. (Page 11.)

Now on these passages I may remark, in respect of No. 1, that this aspiration of President Wilson for a League of Nations to include Germany is obviously in flat contradiction to the spirit of those resolutions of our own Committees which we considered in our last lecture. Those resolutions would exclude Germany altogether from the economic life of the European Allies. Hence it is further clear that the suggestions contained in (2) are virtually ruled out by those resolutions. You cannot put economic pressure upon a country which you have already ruled out of all participation in your economic life; for having done so, the force of economic pressure is exhausted. But the difficulties in the way of such a course of conduct are far greater and more formidable than this alone. It is only in extreme cases that economic pressure can exert any formidable influence on the conduct of a recalcitrant nation.

Granted at once that a naval blockade on a grand scale can produce a scarcity of necessaries amounting to famine, and so compel surrender, this amounts to something much more than *economic* pressure. Those who talk so readily of economic pressure seem to me to forget that economics is at bottom a psychological science. So that the efficacy of a given amount of economic pressure depends on the psychology—the mental fibre, if you will—of the *pressee*. One man says, "The necktie that used to cost me 3s. 6d. is now 5s.; we really cannot stand this, we must give in." Another will say "They have taken my coat, they have taken my waistcoat; but, damn it, they may take my shirt, but I won't give in." And when applying a given measure of economic pressure you can never tell, until you try, which of these two kinds of men you have to deal with. Again, it is hopeless for a small State to try to put economic pressure on a greatly more powerful neighbour. Of what avail would it have been to Serbia in 1914 to threaten Austria with economic pressure as her reply to the famous or infamous ultimatum? Clearly, economic pressure could avail the small State nothing unless and until all the large States of the League agreed to apply it. To which end the large States will have to be convinced that the grievance of the small State is of importance enough to justify their interference.

Still weaker would be the force of economic pressure as against the *gradual* violation or evasion of the League stipulations by an unscrupulous power. Suppose it stipulated that Germany must not have more than ten dreadnoughts. She builds

an eleventh. Remonstrance is met by the plea that one of the ten is now antiquated, and is going to be put out of commission. Who will persuade the rest of the world to adopt measures of economic pressure, and maintain them until one of the eleven is actually dismantled? And, the eleventh being tolerated, what of the twelfth, and the thirteenth —Germany all the while protesting that her intentions are absolutely peaceful and friendly, and that her dreadnoughts are only meant to keep the peace in Bolivia, which shows signs of unrest, or for the suppression of piracy on the coast of Switzerland? If England has all this time been under stipulation to have not more than fifteen, England will keep her word, not having adopted the "scrap of paper" theory; until, as against England's fifteen, Germany has twenty, and smiles at the notion of any one daring to put economic pressure on the possessor of the strongest navy in the world. Unless the League of Nations is resolutely prepared to carry out to the utmost detail the principle of *principiis obsta*, economic pressure will be valueless as a force to be held *in terrorem* for the restraint of evildoers.

Still more serious as an objection is the fact — a fact which the investigations of our former lectures have, I trust, put into a still clearer and more vivid light—that no economic pressure can be applied without serious loss to those who apply it. And this will render its application doubtful, and its employment, in economic phrase, frictional. When Germany, received into the League of Nations, has re-established commercial relations, on a large scale, with England and America, these

relations cannot be suddenly renounced save at great cost to England and America. Vast commercial interests will cry out against the application of measures which will involve them in the ruinous loss of their own markets; and will certainly find in the provocation given, and alleged as the cause and justification of the proposed measures, no sufficient reason for their adoption. And further, economic pressure is a game that two can play at; and in the economic warfare thus precipitated, a great manufacturing and exporting country like England is not likely to be the smallest sufferer.

Nor does the illustration drawn from individual obedience to law, in the third of the above extracts, add greatly to the strength of the argument. If I break the laws of my country to the extent of, say, snatching a watch, I am at once opposed to the rest of my fellow-citizens in the hopeless odds of one against forty millions, as a whole, and, in particular, myself against a burly constable, certain to be, physically, more than my match. But the recalcitrant country will, at best, be one against seven or eight; and may be, or may easily fancy itself to be, as strong as the other seven put together. Germany not long ago so fancied herself; and though she was happily mistaken, it has been the toughest job in all history to prove to her her mistake; if, indeed, she does even yet regard the mistake as proven, finally and beyond redemption.

Again, be it remembered that no country would venture on recalcitrancy without long and careful preparation, which preparation would take the

form, *inter alia*, of securing to itself allies against the day when the recalcitrancy should be declared. A nation intending recalcitrancy would do its best to persuade some other member or members of the League not to be "bullied by the majority" into applying an economic pressure when the application would be as ruinous to itself as to the country to which it was to be applied; and as there can be no doubt that the assertion would be economically true, and capable of easy demonstration, it is, to say the least of it, by no means certain that the call of the League for effective measures of pressure of the kind would meet with an affirmative response.

A League of Nations by all means; but with a clear understanding that in this international regimen, as in the maintenance of internal law and order, the *ultima ratio* is force; and that economic pressure, save in extreme cases wherein it is applied by the methods of actual warfare, can do but little. A League of Nations by all means, but taking care that, while binding all its members by solemn obligations, no power to break away shall be left in the hands of any nation to which no obligations are solemn.

Passing now to the consideration of England's financial position in the immediate and in the more remote future, we are met at the outset by the gigantic fact of our debt. It seems to me of small interest to endeavour to arrive at any exact estimate of the precise amount for which British finance will have to be answerable. Something will depend upon the ultimate fate of enormous loans advanced to our allies, and much upon the

final decisions of the Peace Conference as to indemnities. But the British debt at the close of the war cannot be less than five thousand millions sterling, and may approach double that amount. Taking even the smaller figure, we have it that the interest on it at 5 %--being 4 % of actual interest and 1 % sinking fund—runs to £250,000,000 per annum. And of course this will be the actual debt that British finance will have to meet; for when dealing with national debts, it is always the interest which constitutes the real debt, the nominally principal sum being in reality only the price of redemption. Here again we face the fundamental fact of economics, that loans, gifts, payments of all kinds, can only be made in goods. The actual procedure in raising this debt has been to call upon our producing classes of all kinds, Landlords, Capitalists, and Labourers, to supply the Government with what goods they wanted for the war, and to accept in return an undertaking to admit the suppliers' right to receive annually goods to the value of 5 % of the value of the goods so supplied. Clearly then, once more, productiveness will be the key to the situation.

Nor will discussion as to what might have been or what ought to have been at the beginning and during the period of the war lead us along any very progressive path. One thing is certain: the prevalent economic opinion in the early years of the nineteenth, is no longer the same as that of the twentieth, century. The policy of the "nothing but taxes" method had begun to be whittled down even by the time of Mill; and few there are now who would maintain that the whole

expenses of a great war should be met by taxation within the year. The theory of Dr. Chalmers that a war paid for by loan was really paid for by a tax on wages, was too near a relative of the Wage-Fund Doctrine to survive the fall of that tyrant theory. Nor does the plea that a just war is waged as much for the benefit of our posterity as for our own, "cut ice" any more effectively than the alternative plea that it is the duty of each generation to strive to leave the world better than it found it, that our posterity may rise up and call us blessed. Happy, no doubt, the man or woman, and still happier the generation, whose closing eye gazes on a bettered world; for whom the sun that rose in hope shall set in glory. But the man in the street will rather echo the ironical question once raised amid much laughter in the House of Commons—"What has posterity ever done for me?" the question to which Mill, then in the House, returned such brilliant answer.

Enough for us at present that the debt is there, and that we are called upon to meet it. How shall this be done?

One answer to the question there is which has at least the merit of simplicity, the answer "Not at all." Repudiation of the whole burden may, for aught I know, still find its advocates, though none, I am well assured, among economists of any repute. Repudiation has now, I believe, no respectable adherents. Enough to say of it that it would end for ever the whole national credit. One only merit the plan can claim,—that in Mr. George's phrase, there would be "no next time." Any future war, or indeed any future project of

betterment for a people which involved really heavy expense, would have to be foregone, for none would lend a copper for its furtherance. And it is now well acknowledged and understood that the year's expenses of a modern war are more than the year can pay; and further we can all accept the dictum of Professor Scott, that "a failure to use the nation's credit in a great war would be a sacrifice of combatant efficiency through a mistaken economic pedantry." The nation's credit must somehow be maintained.

Shall we then shake ourselves free of some portion of the debt by paying the price of redemption of that portion of it? And if so, whence are we to compass the means? One proposal there is, of quite respectable antiquity, and so protean in form as to take on the appearance of many separate schemes. The titles under which it usually appears are "Conscription of Wealth," "Conscription of Capital," or a "Levy on Capital." I do not mean that these variants of name do not imply certain differences between the schemes *inter se*. But in their essentials they are much alike. The justification for any such scheme is alleged in the difference in the amount, and still more in the kind, of the sacrifice endured in this war by those who have risked their lives in the field on the one hand, and on the other, by those who, even if employed in war work, and doing what was in their power to advance the national cause, were exposed to no personal danger. Having conscripted the bodies of the soldiers, may we not justly conscript the property of the non-combatant?

The argument has certainly something to com-

mend it. "Equality of sacrifice" is quite an orthodox principle for the exaction by the State of compulsory contributions. But several considerations militate against the full force of the position. In the first place, while admitting at once that the sacrifice of life, or even that of those wounded, in the field, is incapable of comparison with that of the citizen taxed in the safety of his home, yet science compels us to remember that the one is a risk, and the other a certainty. The soldier at all events hopes to come through; but from the tax-gatherer there is no escape. So that the just estimate of war sacrifices is, in mathematical phrase, a function of two variables, amount and certainty. This by no means disposes of the claim upon the citizen; but it must be remembered in mitigation of a judgment which might otherwise be too severe. It is no heartless underestimate of the frightful desolation of the widowed and fatherless home that points out that the position of the unhurt soldier, who comes back to be fêted by all the girls of his village, compares not unfavourably with that of the professional man who, with his profession ruined by the war, has to raise money on his life-insurance policy in order to pay the three-years average income tax on an income reduced by the war to vanishing point. I have no wish to press this point unduly; but there is another and a weightier consideration. Wealth and capital *have* been conscripted, and that to no inconsiderable extent, already. The nation and the army have been so nearly identical that many a business man, that is to say, many a capitalist, has had to serve

at the front, with results more or less closely approximating to financial ruin. And such a man, if he survive the dangers of active service and return to find his remaining capital subject to partial expropriation, will justly feel that he has been had both ways. The taxes which have paid such portion of the expenses of the war as have been already actually met, have largely fallen on capital. Railways have been taken over, our mercantile marine has been so commandeered, and when in government possession has been so (perhaps unavoidably) misused as to leave it in a position from which it will probably take years to raise it again to its former efficiency. There is hardly an hotel left in London which has not been pressed into the service, and filled with a motley population of "flappers" in the employment of the Government. To have saved anything which yields an income seems to be, in the opinion of our Government, the supreme wickedness a sin against the Holy Ghost to be sternly put down by excess taxation. One is tempted to ask the adherents of this Capital-conscripting plan what more they want than they have already taken? If an inventory of all our personal possessions is to be taken, and a percentage to be claimed by the Government, it remains to show how the necessary realization is to be effected. If they claim the value of, say, my piano, I shall have to sell it. But every one else would be selling their pianos at the same time; and I should get about 4d. for it, carriage paid to the home of the buyer. And the same considerations apply to the proposed Levy on Capital. That levy has already

taken place to an extent of which few seem to be aware, and the full inconvenience of which will only be revealed when the task of restoring our industries has really been entered upon. Machines for making, e.g. metal hot-water jugs have been commandeered and altered so as to take part in the manufacture of munitions of war. In that function they have been worn out or nearly so; and it would no longer pay to reconvert them to their original purpose, even if it were possible. Pasteboard and cardboard machinery of many kinds has gone the same way, with the same result. Now the greatest and most serious difficulty of the period of industrial reconstruction will be to replace the capital for the old, and obtain enough of it for the new, conditions of industrial England when our industry begins, like a giant that has slept, to stir again its mighty limbs. From the simplest tool to the most complicated machine the cry will be for capital. Food, clothing, shelter, tools, and materials, the five great elements of capital, will be in unprecedented demand in the hard times that are coming. The present clamour - not, as I hope to try to show, an entirely wise one for England—for agricultural extension no matter at what price, on English soil, will be chiefly a matter of capital, and recalls again the *Lay of the Labourer*:

> A spade, a rake, a hoe,
> A pickaxe, or a bill;
> A hook to reap, or a scythe to mow,
> A flail or what ye will.

This is a cry for capital; and he will bring woe

upon himself, and greater woe upon our England, who makes capital shy, or teaches it to take to flight.

Another plan, which I had the advantage of hearing expounded by Mr. Sidney Webb at a meeting held recently in London—one of three for the statement and initiation of the policy of the Labour Party—runs somewhat thus:—

At a given date, all the possessors of property in the country are to be considered to have died, and to have come to life again as their own heirs, subject as such to a 10 % estate duty. This measure is to be meted out to all who have £100 worth of property; while all who earn 30s. a week or more are to pay a poll-tax of 10s. a year. So that those who have property would lose one-tenth of it, while those who have none would still pay 10s. a year. What could be more equitable? But it may be well to look a little further. How will this plan affect those who save as compared with those who simply squander? Here are two men, Brown and Jones, our old and respected acquaintances. Brown, a barrister, earns £1,000 a year, lives a bachelor life in the Temple, and beyond the cost of living there, spends the rest of his income during vacation time at Monte Carlo. Jones possesses £20,000 worth of property, say in industrial shares. He sells them, I will suppose at par, and invests in War Loan, at 5 %, getting an income of £1,000, the same as Brown's. Jones must return himself as owner of £20,000, of which he must surrender 10 %, or £2,000, in ten yearly instalments of £200 each year; and the socialist verdict is—"Serves him right for saving."

Brown returns "No effects"; so he pays only the 10s. poll-tax, or a total of £5. Under such a *régime*, who will be fool enough to save? The racecourse and the faro table will be the refuge of the wise, and "Eat, drink, and be merry, for to-day we are to die," will be a variant accepted as the only prudent rule of life when Mr. Sidney Webb becomes Chancellor of the Exchequer.

I pass to the consideration of the system of taxation to be adopted during the coming early years of peace. Tremendously heavy it will undoubtedly have to be. But an astonishing weight of taxation can be carried by an energetic and thriving community provided it be so levied as to commend itself to the sense of justice of the people. In this matter I fear there is no royal road to solvency. But just because the burden will be heavy, so much the more important is it that no step be taken which shall discourage either capital or labour so as to make their joint effort less productive. Once again, and ever again, payment is in goods. Be productive, and all else that is economic shall be added unto you. The problem of our finance in the immediate future is a problem of production; and every measure which diminishes by one iota the ratio of produce to investment of labour-capital-effort lessens our capacity to pay. One thing is certain. Whether by the acceptance of sound theory, or by that painful kind of experience which sometimes succeeds, but unfortunately as often fails, to teach "the practical man," we shall learn that doles, whether by protectionist measures or by 60s. guarantees, whether to manufactures or to agri-

culture, will not increase as a whole the producing, and therefore the paying, power of the nation.

We shall have to keep in mind the fruitful saying of Swift that in the arithmetic of the customs two and two do not make four, and the half of four is frequently five. Some of our taxes have unavoidably been raised to a point during the war which will make them in peace time less productive on the whole for the country than they may be expected to become if their rate be lowered. Such I believe to be the case with the excess profits duty. Again I fear the discouragement of capital and of its accumulation. Granted at once that the mad career of the profiteer must be stayed, it still remains sound policy to offer strong inducement to those whose savings will have to come to the rescue of the country at its utmost need. So that the financial problem in this direction seems to take on the form of a problem of reconciling two different policies—that of staying the hand of the profiteer, while not discouraging the capitalist. And problems of reconciliation of opposing policies are ever among the most difficult in the region of finance. In this case it is possible that the principle of Quasi-Rent might throw a useful light upon the question.

Such portion of the theory of Quasi-Rent as is pertinent to the present question can be roughly stated in this way:—When an article is sold for a price above its usual price, the discrimination as to whether the excess should be classified as a rent or not will depend on whether it was due to a rise in the expenses of production or from a cause due to extraneous alteration in the conditions

of demand. In the latter case, if we are concerned with a manufactured article, the excess price will as a rule only endure until the amount of fixed capital available for the production of the thing has been sufficiently increased to cope with the increase of demand. Economically, therefore, such quasi-rent is a question of time; the non-coincidence of two production-periods, the short period of the manufactured article itself, and the far longer period of the appliances necessary for its production when the appliances are ready. To take a fanciful example:—

Suppose that, as a celebration of the present victory, the Court were to express a strong wish that every householder who could afford it should fit up his front windows with new lace curtains. The resulting sudden rush of demand for lace curtains might bring it about that the curtains normally sold for 10s. a pair would now fetch 15s. Omitting small details, the extra 5s. would be a quasi-rent, closely analogous to the excess profits recently made in munition work. Now if the original price of 10s. yielded, say, a profit of 1s. per pair, and the maker is now in a position to sell in a given time 1,000 additional pairs, he thus gains, as result of the Court action, an additional £50 at the old rate of profit, plus another additional £250 as "quasi-rent." If the whole £300 is regarded as "excess" profit, and taxed as such, the maker will be tempted to decline the extra orders, and the more so the more heavily the excess is taxed. Whereas, if only the £250 of real quasi-rent is assessed, the sense of injury will be largely obviated, the tax will be more easily

collected, because more readily paid, and the revenue will obtain an increase more truly "economical."

This particular case will serve to indicate the direction in which, to the best of my judgment, the means should be sought whereby to reduce the mass of the national debt. If every means be taken for increasing the total sum of the production of the country, then all the main elements of income, wages, profits, and rent, will be augmented, and an income tax levied upon these will also furnish a proportionately increased revenue. But the income tax itself stands in crying need of revision, not so much in respect of the amounts collected, as in the methods of assessment. The present iniquitous system of the three-years average will have to find a juster substitute. That system almost confessedly endeavours to balance one injustice against another. On a rising income an injustice is done against the Exchequer in favour of those best able to bear the full burden of the tax. The man whose income has increased, while the claims upon that income have not yet become fixed by habit, by contract, or by convention, is the man who best can pay on the full amount of his receipts at the full rate at which those receipts are normally taxed:—so the three-years average comes in to relieve that man of a large portion of what ought to be his obligation to the nation. But the man who is, e.g., under the obligations of lease-contracts, or whose son has embarked upon, but not finished, a University education, and whose income suffers sudden and serious diminution, has still for three years to pay tax on an income

he does not receive, and such tax is too often the final straw that breaks the camel's back. If the great central principle of Equality of Sacrifice in taxation is not to be a mere delusion, some contrivance must be arrived at which shall obviate this injustice. If any allowance for change of amount of income is to be made in the assessment of income tax, I submit that it ought to be made in exactly the opposite direction to that in which it is made at present. If an increased income were taxed upon three times the increment in the first year, twice the increment in the second year, and only on the increment itself in the third year; while the diminished were exempted from taxation on three times the decrement in the first year, twice it in the second year, and only on the decrement itself in the third and succeeding years, I conceive that a much nearer approach to equality of sacrifice would be accomplished. A man whose income rose from £700 to £800 a year would thus pay income tax on £1,000 for the first year, on £900 for the second year, and on the actual £800 for every succeeding year for as long as the income stood at £800. Conversely, a man with an income at present date of £1,000, which income falls to £700 in a certain year, would subtract £900 from the £1,000 in the first year, and pay on £100 only; in the second year he would subtract £600 from the original £1,000, and pay on the £400; and in the third year, when he had had time to adjust his way of living to his reduced circumstances, he would pay on the whole of the £700 now left to him. Of course this method of computation should not be allowed to enable a man to claim.

or involve him in losing, any exemption or abatement attaching to the actual amount of the new income; neither the contributor nor the tax-gatherer should be allowed to use this method of computation to put the income in a different category from that to which it actually belonged. But the plan would make the State a sharer in the good fortune of the recipient of the raised income just when he would least feel the contribution as a burden; whilst the man whose income suffers a serious fall in the evening of his life would find in the lessened burden of the tax some slight mitigation of his loss. Of course I shall be told that such a plan is utterly fanciful, a mere dream. And I reply that even a dream of justice is better than the reality of a wrong.

Personally, I must confess that I am unable to share the enthusiasm which some modern economists and many modern politicians have displayed for the income tax as the ideal method of raising revenue for the State. My reasons are not wholly economic, so I will but adumbrate them here. I cannot but look upon the income tax as containing elements of constitutional danger. Already we have had it pointed out, as an unexpected and incidental benefit arising from the war, that we have found out that an income tax of four or five shillings in the pound is endurable; and it is more than hinted that such a rate might be made permanent for the benefit of the proletariat. But if five, why not ten or fifteen, or even more? I may be quite wrong; but to me this seems to savour of Bolshevik finance and, as such, to be possessed of considerable economic as well as

political disadvantages. Nor can I see how the income tax is to be administered without endowing the assessor with powers distinctly dangerous to constitutional liberty. But these considerations bring me too near to politics for it to be desirable for me to pursue the subject here and now at any greater length. Returning to my strict economic text, I repeat that the payment of taxes, as of every other claim, can only be made out of produce; and that revenue is only payable ultimately in things made. This being so, increase of produce is the one and only way to so far increase revenue as to cope with our gigantic debt.

I have but one more subject to ask you to consider with me to-night, the question of our currency.

The difficulties surrounding this subject are so great, and of such a perplexing nature, that it would seem as if, in economic theory as in other relations of life, money is the root of all evil. The only way to maintain an even keel in steering through the shoals and quicksands of currency questions is to possess, and keep resolutely in mind, the leading facts of the laws of value as applied to money. I take money to mean coined metal, and all credit documents which serve the purposes of exchange to be rightly described as substitutes for money. Cheques, bills, etc., are instruments of barter; tools by means of which man has been enabled to dispense with the more expensive appliance, real money. Supposing in the first place that there were no substitutes for money, and that all our payments had to be made in golden sovereigns, except of course those small

payments which are met by the use of small change in the form of subsidiary coins, then the Law of the Value of Money, or of the general level of prices, would be that known as the Law of the Inverse Quantity. In mathematical language, its value curve, connecting its value with its amount, would be a rectangular hyperbola. In this sense the demand for money is for enough of it to conduct the cash transactions of the community. And, supposing each piece to be used only once, the Law would be expressed in this first crude form by the formula—

$$V = \frac{1}{Q}$$

Consider, in imagination, your sovereigns to be real live labourers, say bricklayers' labourers, who have to carry a certain number of bricks across a road. If you have 100 bricks, and 5 labourers, each to make only one journey, they must carry 20 bricks each. Double the number of labourers, each making one journey, and they carry 10 bricks each. Halve their number, and you double their load. Let each make two journeys, and you halve the load to be carried each time. Apply this reasoning to the money, we come at once across the fact that each piece effects many transactions in doing a given amount of business; and we have the definition—The *Efficiency of the Currency* means the number of times each piece changes hands in doing a given amount of business. Again, if you send, say, half of your bricks by a truck, the truck will be a substitute for carriers,

and will leave only half as great a load for each man on each journey. And the demand for carriers' labour will be the amount of bricks to be carried, less the portion carried by the substitutional truck. And the load for each man on each journey will be, the number of bricks to be carried, less the number in the truck, divided by the product when the number of men is multiplied by the number of journeys.

Apply the same reasoning to the pieces of your money. From the total trade of the community in a given time subtract the portion of it done by cheques, bills, and other substitutes for money. Divide the remainder by the number of pieces, multiplied by the number of times each piece changes hands in the course of doing that amount of business.[1] And the quotient will give you the value of each piece, according to the "Quantity Law." Consequently a large increase in the amount of your money, or of its substitutes, lowers the value of each piece, or in other words, raises general prices. Needless to say, this is what has been going on during the war to an enormous extent. The "fiduciary" paper of the Bank of England – that part of the Bank of England notes not covered by gold, but only by Government securities in the hands of the Issue Department – which on June 1, 1914, was £18,450,000, had by July 1918 risen to £248,862,000. "Bradburys" and "Pink-uns" have been poured out upon the

[1] In formula—

$$V = \frac{T - b}{Q \times e}$$

public in a veritable water-spout. And economic law has asserted itself in the present terrific range of prices. Can anything be done?

In the First Interim Report of Lord Cunliffe's Committee on Currency and Foreign Exchanges after the War (Cd. 9182, 1918), the danger of this state of things is fully admitted. "This credit expansion," they say, "cannot continue after the war without seriously threatening our gold reserves, and indeed our national solvency. . . . The shortage of real capital must be made good by genuine savings. It cannot be met by the creation of fresh purchasing power in the form of Bank advances to the Government or to manufacturers under Government guarantee or otherwise, and any resort to such expedients can only aggravate the evil, and retard, possibly for generations, the recovery of the country from the losses sustained during the war" (Sections 16, 17).

So far, I have no doubt that the Committee has taken a correct view of the present position. They recognize that if we are to have any hope of restoring the pre-war state of things in relation to our money, we must restore and maintain our gold standard. But of this they give us but little hope, and in this too, I fear, their opinion is but too well founded. They say (Section 38): "It is probable that after the war world prices will stand for many years." And consequently they think that it is neither necessary nor desirable that there should be an early resumption of the internal circulation of gold coin. But they do report in favour of a central reserve of 150 millions, and of a reduction in the amount of currency notes

until the amount of fiduciary notes that can be kept in circulation, consistently with maintaining this reserve, has been reached, or rather come down to. I trust that this, as it seems to me, wise advice may be followed, and even exceeded. Unless and until the enormous bulk of our Treasury issue of currency has been brought down to safe and reasonable limits, we are, I verily believe, in danger of following in the path of the French assignats in the time of the Directoire, when it took 6,000 francs to pay for a pound of butter. Diminish the amount of this superfluous currency, and you will introduce a period of falling prices against which capital will be easily able, by the exertion of reasonable prudence, to protect itself, and which, as all times of falling prices do, will on the whole benefit the wage-earner. While in this way, and I believe in this way only, will the distress be alleviated of that large class, now suffering so severely, and for the most part suffering in so brave a silence, the holders of fixed incomes, and the portion of the middle class who are living, or trying to live, on professional incomes reduced by the inflation of the currency to a third of their pre-war value, while faced by all the pre-war obligations of rental and other contracts, and the demands of a taxation which, however unavoidable under the circumstances, falls on them with such ruinous severity that to many in the evening there is no light.

LECTURE VII

INDUSTRY AFTER THE WAR

We now pass to the consideration of the great question, or rather series of questions, all closely related, the treatment of which has been our ultimate purpose throughout all that has gone before. This concerns the vast and complicated subject of the relations between Labour, Capital, and the Government, in the immediate future, and in the developments of more permanent industrial organization. Obviously only the outlines of a question of such magnitude can be sketched within the limits here and now imposed upon me. But I trust that even though we can on this occasion go but little beyond the bare elements of the discussion, yet a clear statement of some of the main issues may serve to lighten the path and in some measure smooth the way for the extremely difficult and arduous pilgrimage which, if I can read the signs at all aright, lies now before industrial England.

In this hope I am the more encouraged because it seems to me that the clear realization of the nature and scope of the problem is yet more rare than the solution of it need be difficult. The present danger—I think a real and a serious one—of our industrial position lies rather, if I conceive the matter correctly, in the failure of the multitude

to realize the rigidit with which in the world of economics, effect follows upon cause applied, and the consequent inevitable necessity to invoke the right cause if the desired effect is to be compassed, than in any inherent difficulty in applying the right cause when once the nature of the case has been correctly diagnosed.

Essentially, the crux of the industrial problem lies in the fact that the Government stands at the present time absolutely pledged to an absolute impossibility. We are faced by an *impasse* of the first magnitude. Unconditionally and without reservation, the Government stands pledged to take, on the conclusion of the war, a certain course with respect to the industrial organization of the country; and that course, it is now clear, it is impossible to take, consistently with the national prosperity and with any real recovery from the devastation wrought by the war. How has this condition of things arisen?

Before the war there existed in all our great production industries a complex of conditions which had been built up by long and arduous struggle on the part of the Trade Unions. That state of things the Unions, in patriotic response to the cry of the nation in its need, a cry voiced by the Government, consented to abrogate for the period of the war; on condition that the Government pledged itself to bring about its complete restoration when the war should be concluded. Like Sergeant Tilmon Joy in Colonel Hay's poem,

> They laid their politics out o' the way,
> For to keep till the war was through.

The whole system of Trade Union rules, privileges, and practices, under which so many of our chief industries had been carried on before the war, was as it were warehoused, like an absentee's furniture, to be taken out of store again, and restored to its original purposes, on the return of its owner. It is most important to remember that it is no small matter of arrangement that was changed by the concessions of the Unions, and the restoration whereof is now demanded by those same Unions in reliance on the Government promise, but a vast, far-reaching, and most elaborate system, the achievement of years of silently organized growth on the one hand and strenuous political strife on the other, and believed in by millions of our countrymen with a veritable passion of credence more often associated with theology than economics. And the whole of this system went by the board in reliance on the Government pledge, and if the pledge is to be redeemed, it is the whole of it that is to be restored. And the reason why it was abrogated was that it was seen to be diminishing production; and, at a time when a maximum of production was a question of life or death for the nation, the maintenance of the system was impossible if the nation was to be saved.

This system is well designated as a "network" by Mr. Sidney Webb, who thus describes it in his work on "The Restoration of Trade Union Conditions":—

> This network of rules and agreements, usages, and customs was more extensive than is usually realized. It covered different points in different trades, and often

> in different districts of the same trade. Taking the network as a whole, and at its widest, it embraced not only the standard rates of wages, and the length of the normal working day, together with the arrangements for overtime, night-work, Sunday duty, mealtimes, and holidays, but also the exact classes of operatives (apprenticed or skilled, semi-skilled or unskilled, labourers or women) to be engaged or not to be engaged for various kinds of work, upon particular processes, or with different types of machine; whether non-unionists should be employed at all; what processes should be employed for particular tasks; what machines should be used for particular jobs; how the machines should be placed in relation to each other, and the speed at which they should be worked; whether one operative should complete a whole job, or attend only to one machine, or form part of a team of specialized operatives each doing a different process; what wages, if any, should be paid in the intervals between jobs, or whilst waiting for material, and what notice of termination of engagement should be given; whether boys or girls or young persons should be employed at all, or in what processes or with what machines, or in what proportion to the adult workmen; whether the remuneration should be by time or by the piece, and under what conditions, at what rates and with what allowances; and perhaps where it prevailed most severely criticized of all, but by no means universally existing—what amount of output by each operative should be considered a fair day's work, not to be considerably exceeded under penalty of the serious displeasure of the workshop.

This well-named "network" had to be broken through in order that our very existence as a nation might be preserved by making our industry productive up to the full extent of its powers. But if all are agreed that a certain system had to be abrogated in order to obtain maximum efficiency, this is but another way of admitting that that system had hitherto been an obstacle in the way of such maximum efficiency. Under temporary

pressure the system was abandoned, and the policy reversed. I wish I could think that it had been definitely repented of for the permanent future welfare of the land. But of this there can be no possible doubt:—We have here a definite admission that the Union rules and practices before the war had been restricting production; whence it follows that those same rules and practices, if restored in their entirety, would again result in similar restriction. But here the Unions, either from ignorance or from contempt of economic law, have been working all against their own interests, as well as against the interests of the community as a whole. For if there is anything in which the chain of economic cause and effect is definite and clear, it is the connection between productiveness and wages. Restriction of production means a smaller supply; a smaller supply means a dearer commodity; a dearer commodity means a smaller demand; a smaller demand for a commodity means fewer labourers employed to make it; fewer labourers employed means lower wages all round. The restriction policy is at once disastrous for the nation and suicidal for the men, who are thus "sawing off the branch they are sitting on." And yet the abrogation of these restrictive regulations and practices,—regulations and practices by which none suffered more instantly and severely than the labourers themselves,—is described in the current language of the industrial world as "labour's sacrifice." Yet the result is less to divide between labour and capital. Both labour and capital get less; whilst the consumer, not party to the dispute and usually knowing nothing of the cause, finds

himself established as sleeping partner in the loss. A blunder worse than a crime.

Nevertheless the Government pledge was given —a pledge of full and complete restoration—a pledge absolute and unconditional, without any reservation whatever. And at present the Unions seem inclined to demand complete redemption of the pledge, *as they have a perfect right to do.* No advantage can be gained by any dispute or denial of their rights in the matter. The wisdom of giving the pledge in the first instance is not now the point. It was given; and the Unions, as powerful now as they have ever been, claim its redemption. Their power, if in this direction exerted to the full, will make things bad for the Government in the present, and worse for the workers in the future, unless on both sides wise counsels can be made to prevail. There is an old story of a Cambridge examinee who was asked what would happen if an irresistible force impinged on an immovable mass, and whose reply was "Almighty smash." Some way must be found to avoid this result in the world of industry.

It must be observed that it is not only the powers and rights of the Unions that are to be restored; it is also the "practices"; practices described by Mr. Lloyd George in the House of Commons as "practices that interfere with the increase of the output." So that the Government stands pledged to restore, and when restored to accept, the principle of "Ca' canny."

But there are difficulties, many and great, in the way of the restoration, not only of these special powers and practices of the Unions, but of peace

conditions generally for our industries. Something like five millions of men have to be brought back from war to civil employment; and the mere magnitude of the problem may well give pause to any but superficial thinkers. The first necessity may well be considered to be that of a clear and well-thought-out program of industrial renewal. The first care should be to restore our coal, since this is the ultimate essential of all our industries. Here the danger of strikes seems greater than elsewhere, not only on account of their probability, and their severity when they occur, as indicated by previous experience, but also because of the wide disturbance they evoke in the industrial world whenever they actually happen. Next, and indeed coincidentally with our coal, should come the question of transport. One would fain be sparing of criticism of those who have had to contrive as best they might for the needs of the greatest war in history; but the Government control of this vast interest has had a record the reverse of cheerful. Our railways, we are told, are to be taken over by the Government. It is to be hoped that competent business men and methods will be taken over with them. Shipping has been controlled; and the continuance of the control is the subject of almost daily protests, not, be it observed, by "doctrinaire economists" like myself, but by authorities like Lord Inchcape, who may be allowed to know about shipping most of what is worth knowing. Within Britain itself there will be much room for the development of canal transport, so foolishly neglected in the past while railways seemed to

render them superfluous, but which now must certainly be prayed in aid of our heavy traffic if we are to avoid a serious amount of stagnation in respect of heavy goods. Such development must needs be a somewhat slow process; but some Government financial aid at an early date would be wisely afforded to an undertaking highly productive and even necessary in itself, and the occasion of much employment for the kind of unskilled labour whose restoration to peaceful industry is likely to present some special difficulties.

The great difficulty about the women who have taken the places of the men, now that the men are coming back, is one with which I will presently deal more fully. For the present we need only remark that this is one of the many ways in which labour has been "diluted," many women and some unskilled men having been put on to do work which has hitherto, under the Trade Union rules aforesaid, been a monopoly of skilled workers, who are now coming back. But here, as we shall soon see, the restoration of the Union rules would involve a waste of skill the worst possible form of waste.

Other difficult questions will, there is little doubt, arise as the use of automatic machinery, and the standardization of "parts," leading to long runs of repetitional production. These methods of production have met with much opposition from workmen in England, though the men of the United States seem to have willingly accepted them.

Again, much machinery has been converted from the purposes of peace to those of war. And in many cases it can hardly be converted back

again; indeed, a good deal of it has been worn out in war service.

Nor will the returning labourers themselves fail to bring with them problems of their own. There must be not a few of whom it is unhappily true that they were never so well off during the peaceful portion of their lives as they have been during their service in the army. Such men will display little eagerness to resume the hardships and precariousness of the casual labourer's life; and the country's debt to men who in risking their lives have risked all they had will render unthinkable the neglect of their claim to something better than their former state. And as this difficulty appears in one form in the case of the returning unskilled labourer, so the correlative form of the same difficulty appears in respect of the juvenile munition worker who for the last four years has been doing quite unskilled and mechanical work in a munition factory, and who now finds himself at the end of a "blind alley" occupation, without acquired skill, and with no prospect of definite employment. Unless care be taken to secure for such workers proper instruction in some fitting occupation, the disbanding of these factories will involve the addition to the total of the unemployed of a large class of the ill-equipped. Such men, as they pass into adult life, and still more in middle age, come under the head of "deserving cases"; probably the most hopeless of human positions.

Once more, then, we find ourselves up against the fundamental dilemma of the position—if we go back to the pre-war conditions we face the coming fierce competition of the world's industries

with our hands tied; and if we do not go back, the Unions will consider themselves betrayed. And what exactly is the position to which we should return? For obvious reasons I prefer, rather than to give a statement of my own, to quote the following account from a writer whose competence will hardly be questioned amongst the advocates of labour policy. Mr. Sidney Webb, in the work I have already quoted, thus describes the extent of the changes that would be involved in a complete return to pre-war conditions:--

> To take only one instance, the restoration of "the practice ruling in our workshops, shipyards, and other industries" would involve, in the case of the Amalgamated Society of Engineers alone, and confining ourselves for the moment to the evidence of the printed rules, agreements, awards, and declarations of employers and employers' associations which are in the possession of the Trade Union, (1) the exclusion of all the women, unapprenticed men, men from other crafts, labourers, and in many factories also the non-unionists, from all strictly engineering work; (2) the total abolition of "dilution" and team-work in all its forms; (3) either the scrapping of the many millions of pounds' worth of new automatic machines, or their manning, even when they were used for simple operations, exclusively by skilled engineers at the old standard rates; (4) the abandonment of any form of "scientific management" wherever it has been introduced; (5) in nearly all establishments the abolition of piecework or bonus systems of remuneration, where they have been newly adopted, and a resumption of the old weekly standard rates; and, in short, (6) a return to the arrangement under which a skilled mechanic, attending to a single machine, occupied exclusively with a single job, did it from start to finish at a fixed weekly wage.
>
> Moreover, it must be remembered that it was, in addition, particularly the unwritten usage of a customary limitation of individual output that the employers and the Government were anxious to get abrogated; and

> this, too, would have to be reinstated and permitted, as part of the practice of the workshop, practically wherever the workmen chose. Other Trade Unions are in a position to prove their "pre-war conditions" on similar lines.

Reading this account of the conditions under which one of our greatest industries lived and moved and had its being before the war, conditions to which the nation is invited, and the Government is pledged, to return, we may well accept Mr. Webb's own declaration that "no Government could insist on carrying out the pledge; and that, in spite of its plighted troth, no Government will try."

The enumeration in the above-quoted extract will serve to guide us in the consideration, *seriatim*, of some of the more important items in the retrogressive changes to which we are thus summoned. And among them there is none more important or more difficult than the first—the exclusion of all the women. This subject is of sufficient magnitude to warrant a digression to itself.

The War and the Woman Question.

The question of the position of women in society generally, and in the industries of society in particular, is a very old one. In ancient as in modern times it has been a war of ideals. And in ancient as in modern times, advanced thought has ever pleaded for the admission of women to a full participation in social functions. The women of the "Guardian" class in the Platonic ideal state were to undergo the same education, and were

thus to be fitted for the same functions, as the men. Here again too we see the fundamental opposition between the ideals of the East and the West. The Spartan women had a degree of liberty and influence quite puzzling to their sisters of the East. Said the Eastern woman to Gorgo, wife of Leonidas, "How is it that the Spartan women alone rule the men?" and received the famous answer, "The Spartan women alone are the mothers of men."

In quite archaic times woman is *compelled* to do *all* the work; modern woman *wants* to do *some* of the work. She claims that the whole field of industry be open to her. Nor is it any answer that there is some of that field for which she is unfit. So am I.

Archaic woman emerges into the mediæval woman, with an ideal of complete subjection. If she was to behave really prettily, it was on the model of the good little children of our grandfathers' time, who were to be "seen but not heard." Chaucer paints her likeness in the "Patient Grizel"; and the same ideal was so far from passing away that we have the portrait reproduced with little change in Tennyson's *Geraint and Enid*. For the girl, the fingers should be never at rest and the brain never at work. To seek marriage was immodest; to fail to find it unwomanly. Beauty was her chief possession, the only one worth talking about; but, with the tragic tread of time that beauty was ever chief mourner at its own daily funeral. Charming, but helpless; and as soon as helpful, no longer charming. For the wife, too often a life of doing her poor best with her limited

knowledge of domestic arts, in daily dread of a penurious widowhood. But just because *no* ideal that is really lived up to can be wholly contemptible, we must be just to this ideal too. It gave the mothers *time* for their children; let the middle-aged of this generation never forget to be grateful for the love that did the rest.

About the third quarter of the nineteenth century this ideal is beginning to break down. Access to industry is claimed. The University of London, my own University, I am proud to say, opened its degrees to women in 1878; and the fight was won. Nothing remained or remains but to clear a few lingering irreconcilables out of their dug-outs.

To the change women have made out their right. Not only in nursing, though none of either sex have exceeded the steadfast heroism of many of our nurses. But every woman tram-conductor released a man for the front. And the claim of the women now is collectively unanswerable.

It is hard to say how far the war has increased the number of earning women. Up to well on in 1915 there was serious danger of unemployment amongst women; but here again a vast change, this time a speedy one, was brought about; and the difficulty became rather to find sufficient workers than sufficient work. And it matters little to the conditions of the present problem whether the thousands who are now visibly employed within range of the public eye were doing something or nothing before the war. For this is certain—they have little intention of doing nothing in future. Can they be sent back to the occupations or the idleness whence they came?

They must be, if the Government is to redeem its promise in full. But we need have little hesitation in saying that they cannot be; and that, with the women's vote in full operation, no Government will try. In railways, banks, shops, and many machine-worked trades, they have now a footing which they intend to keep. And their undeniable efficiency stands in the way of getting them out.

But with the men wanting to return will not the women seek to retain their places by an offer to accept lower wages than the men were earning in the old days? In view of this suggestion various proposals have been made:—

1. That the women should be enrolled in the appropriate unions; not in unions of their own, but in the men's unions presently existing. But it is by no means certain that the women will wish to be so enrolled; and an attempt to force them into these unions against their will will precipitate that man versus woman struggle which it is so obviously desirable to avoid. Procedure in this respect must therefore be both tentative and cautious.

2. That the Unions should insist on "the same pay for the same work." But here we meet the difficulty that no agreed definition has as yet been arrived at of the meaning of the "same" work. If it means crudely the same time wages, the same wage per week, this is only a somewhat underhand way of shunting the women. For estimates in such cases go by averages; and on the average the woman's work is not quite so profitable, on the basis of the weekly wage, as the

man's. The woman is more often ill. She cannot be called upon, in time of emergency, for overtime in the same way as the man. It will have to be equal pay for equal product, or per unit of product, if the women are not to find themselves gradually ousted.

3. Another suggestion is that the women should be displaced on the return of the men, but that they should be guaranteed employment. But all experience is against the possibility of redeeming any such guarantee. They might indeed be guaranteed maintenance, if the state is prepared to face the cost. But employment, in the economic sense of work which, in terms of production, shall be worth its wage, is a thing which Government may indeed do much to promote, but which no Government can guarantee. So we shall have to see whether the women's employment will menace the standard rates of pay, or whether the standard rates of pay will menace the women's employment.

4. It would seem therefore that the problem, if it is to be tackled successfully, must be approached indirectly. If the men return from the front to find themselves unemployed, while the women are retained in the berths the men occupied before the war, there will be trouble. So the first step must be to prevent this unemployment, as far as possible, by an improved organization of the demand for labour. A carefully considered program of the order in which Government work, necessary in itself, but adjustable in sequence, shall be undertaken, would go a long way to obviate the fatal irregularity which results from

a period of hustle followed by another of stagnation. And this first step being taken, the second need not, I think, be the heroic one of a national wage minimum, or standard wage, fixed by statute. Such a statute would almost certainly increase unemployment. But we might arrive at, and then sanction, a carefully ascertained ratio between the wages of men and of women in each industry. The nucleus of the machinery for the consideration and ascertainment of such a ratio is ready to our hand in our presently existing Trade Boards. And with that suggestion we leave the question of women's work as affected by the war, and return to the main line of our argument.

Reverting to Mr. Webb's enumeration of the pre-war regulations of the great Union whose practice he describes, we note that it is not only the women but also considerable classes of men who are to be "excluded." One cannot help remarking in passing that it has been a grievance emphatically pressed amongst the more socialist advocates of an advanced labour policy, that the labourer had to apply to the capitalist for "leave to earn a living." But such regulations show that it is not to the capitalist that the labourer has to apply. Unless the labourer applies to the Union, and moreover, assents to the conditions the Union will impose before the leave is forthcoming, he will find himself "excluded," no matter how willing the capitalist may be to engage him. Nor does the control end there. Even when he has complied with the Union conditions, and got the job, he must still walk circumspectly within

the regulations, or the leave will be withdrawn, and the job be lost. And this power to visit with a kind of industrial capital sentence any deviation from the Union rules and practices stands legalized by the decision in the case of Allen *v.* Flood, in 1897. In this case, Flood and Taylor, shipwrights, expert artisans of excellent character, were employed by the Glengall Iron Company. Their dismissal was demanded by the Independent Society of Boilermakers and Iron and Steel Shipbuilders, on the sole ground that they were workers in both wood and iron. Allen, the London delegate of the Union, admitted that there was no special ill-feeling against either the men or their employers, but stated that the Union was determined to prevent men from working in both wood and iron, and he threatened a strike if these men were not dismissed. They were dismissed, and brought an action against Allen for damages, which they obtained. Allen appealed, and the decision was upheld. Allen then took a further appeal to the House of Lords. The case was argued twice; and the second time the Law Lords called in eight judges to assist with their opinion and advise on questions of law. Of the eight, six agreed with the Courts below, and two said that there was no case to go to a jury. The Law Lords considered for six months; and on December 14, 1897, gave judgment, reversing the judgment of the Courts below. The result of this final judgment was that when an action is lawful in itself the motive with which it is done does not matter. To induce a master not to employ a servant does not give that servant a right of

action. Thus it is within the legal powers of a Union to demand the dismissal of any workman who is for any reason obnoxious to their regulations or who fails in compliance with their practices. But there can be little doubt that this is one of the powers of the Unions which for the future, and in the interests of high productiveness, will have to be abandoned. It must cease to be necessary to apply to the Unions for leave to earn a living.

A third point in the enumeration as stated by Mr. Webb concerns labour-saving and automatic machinery, and what is known as "Scientific Management." Here we come across a difference between the views held by British and American workmen, presenting a contrast which we must regretfully admit to be not very confirmatory of the superiority of British industrial intelligence. Automatic machinery, worked by a simple machine-tender, would not have been allowed before the war; will not be allowed, if the rules are to be restored in strict compliance with the Government pledge. But Mr. Gompers, head of the United States Federation of Labour, is reported to have said, speaking in June 1917:

> We are not going to have the trouble here that Britain had with restriction of production. There has not been any restriction of output for over thirty years in America. We in the United States have followed an entirely different policy. We say to the employers, "Bring in all the improved machinery and new tools that you can find. We will help to improve them still further and we will get the utmost product out of them, but what we insist on is the limitation of the hours of labour for the individual to eight per day."

I have borrowed this quotation from a most interesting article in the *Nineteenth Century* for November 1918, on "Our true Wealth and the War Debt" by Mr. Ellis Barker. I have the more pleasure in acknowledging the interest and power of this article in that Mr. Ellis Barker holds some economic opinions which I am unable to share. Of still greater interest is a letter sent to Mr. Barker by Mr. F. W. Taylor, the well-known American advocate of the system of scientific management, from which letter I take the liberty of extracting the following passage: -

> To illustrate the restriction of output, we had in our works a locomotive and car wheel tyre rolling machine, which was bought from Tangye Brothers in England, and all the apparatus connected with this machine came from England. We had a splendid set of English workmen -that is, they were fine fellows, and were very skilled workers and personally not lazy or shiftless—to run this machine. And yet, after working at it for three or four years, they refused to turn out more than fifteen tyres per day. We called their attention over and over again to the fact that at this rate of production we were making no profit whatever: that it was absolutely necessary to increase the production of this machine. All of our persuasion and all of our talk was of no avail whatever, and we were finally obliged to discharge the whole lot of them, to get every man outside of the works, and ourselves to train in an entirely new and green set of American workmen, who had never seen a machine of this sort. Within three months after training them in, we had increased the output from fifteen to twenty-five tyres a day, and this output went on, right on the same machine, increasing, until, three or four years later, we had an output of 150 tyres a day.
>
> The great obstacle which you have to overcome in England is not the unwillingness of the manufacturers to use modern machinery, but the unwillingness of your workmen to properly use modern machinery after it is installed.

This remarkable illustration is used by Mr. Taylor to enforce the point stated in an earlier passage of the same letter, thus:

> No amount of readjustment of the joint reward of labour and capital can make the English working men materially better off. Their only hope lies in an increase in individual output throughout the country.

We are often asked why it is that America, a protectionist country, has prospered so well under that system. Mr. Taylor's letter supplies one of the many answers:—Men who hold, and live up to, these ideas of production can afford expensive luxuries.

Thus everything points to increased efficiency as the only solution of the industrial problems with which Britain, now that the war is over, will find herself confronted. To this end there will have to be, not a diminished, but a greatly increased application of labour-saving machinery. The workers must somehow be brought to see that this does not mean loss of employment for their class. The consequent greater production means the possibility of greater savings; the increase of savings means more capital; more capital means more employment for the workers, not less. There may be some hard transitional cases; but these must be provided for liberally, but separately, and not to the sacrifice of the advance in the productiveness of the community.

Again, all waste of skill must cease. The Unions will be driven, not by statute, not by capitalists, but willingly, in pursuit of their own interests, to

abolish all Task Demarcation, and Craft Monopolies. This is the real problem of the "Dilution of Labour." Hitherto, certain kinds of work have been classed as "skilled," and the unskilled man was not allowed to take on such work, on pain of a strike if he did. But this is illogical on the face of it; for if an unskilled man can do it, and do it well, it is not a skilled man's job. And the point, from the aspect of productiveness, is that if a really skilled man insists on doing this job, he is wasting his skill during every minute that he occupies in doing it. We must hope to see the real dignity of skill maintained; the craftsman's pride in his craft developed and enforced. In future, instead of the skilled man objecting to an unskilled man being put on to do a job which he, the skilled man, has hitherto done, and in the doing of which there has been a squandering of the noblest patrimony of the craftsman, the dexterity of his hands, he must resent the shame put upon his skill if he is called upon to do any job which the unskilled man can do, and which is therein and thereby shown to be unworthy of his high craftsmanship.

If then, efficiency, and more efficiency, and ever more efficiency, is to be the solution of our post-war problems, can we bring it about that the organization of each and every factory and workshop can be so improved as to largely increase the proportion of satisfaction to effort? It is alleged that such change can be brought about by the adoption of that Scientific Management which is being widely adopted in America. What does Scientific Management mean?

In the year 1910 certain railways in America claimed to raise their freight-rates on the ground of raised wages. Mr. L. D. Brandeis, solicitor for the merchants concerned, set up the plea that if the railways would go in for a more scientific management they could pay high wages consistently with a low cost of labour. He called his witnesses together, and instructed them all to apply the same name to the system of management to which this plea referred; and the phrase selected was "Scientific Management."

The apostle of the movement was Mr. F. W. Taylor, whose letter to Mr. Ellis Barker is referred to above; and the origin and early development of the idea were entirely American. Mr. Taylor saw that piece-wages did not get the best out of the men, as they were afraid of a cut in the wage-rates. And the difficulty was to find out what really was a good day's work—what a man could fairly be expected to do. Having found what this fair maximum was, the next thing was to get it out of the men, "by pushing from beneath and alluring from above." To this end he adopted the "differential rate," by which a low *rate* is paid for a small output, and a high *rate* for a large output. This differential rate afterwards gave place to the Bonus system introduced by Mr. H. L. Gantt; but as the economic principle involved is the same in both methods, I propose here to deal with the differential rate only, as the simplest way of explaining the principle which lies at the root of the system whatever its details may be.

The plan is to establish a wage system which

shall operate as an inducement towards maximum productiveness. Starting from the fact that a simple day-wage does not obtain from the men their best work, either in quantity or quality, the first remedy tried was the adoption of piece rates. But the "straight piece-rate system" leads almost inevitably to the cutting of the rates. This cutting is not always the employer's fault; he often can hardly do otherwise. And this is because, when he sets the piece-rate he does not really know what the fair price is, as he has never had a really energetic day's work done for him by which to set up a standard. So that if a clever workman begins to earn six or seven times as much as he used to do for a day's work, the competition of other employers will compel a cutting of the rate. And to prevent this the workmen will have their earnings limited by their Union, for fear that, if the best of them work too well, the rest will have their piece-rate cut against them.

Profit-sharing is but little better. First because it may arise from good management with which the men have nothing to do; or it may be nullified —there being no surplus profit to share—owing to bad management which the men cannot prevent. Also, it is demoralizing, because the lazy participate in the advantages earned by the energetic.

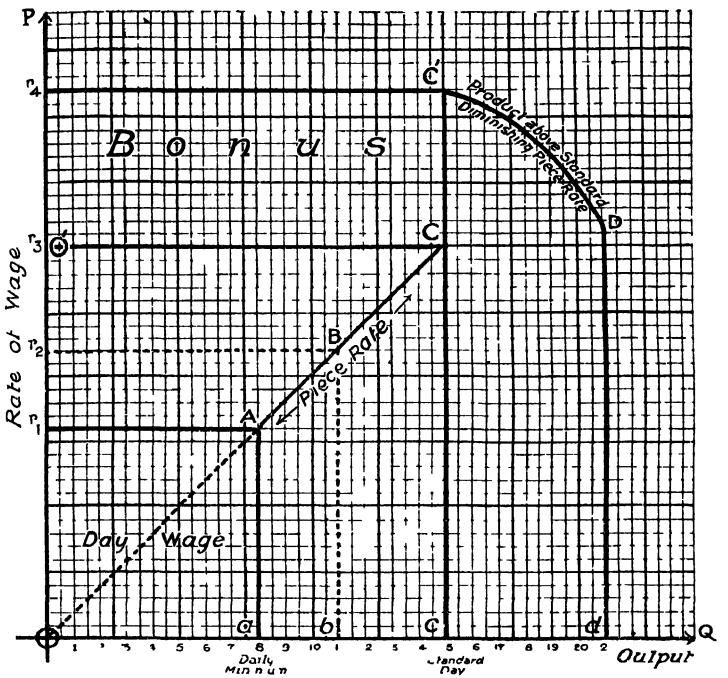
So the plan of scientific management is in the first place to ascertain exactly what the proper day's result should be, to induce every man to work up to this proper day's result, and to penalize those who fail to reach it by giving them a smaller rate *per piece* or, what is a later form of the same thing, by giving a bonus to all who do reach the

standard. Thus every man who is employed at all is guaranteed a day's wage no matter how small his output; and as soon as he turns out ever so little above the daily minimum his piece-rate begins to rise, and directly he reaches the full standard he gets the bonus at a jump: while if he passes the standard he gets a piece-rate which diminishes as the additional output increases. The scheme lends itself well to diagrammatic representation, as thus:

In the annexed figure we measure quantity of output in the direction O Q, and the piece-rate per unit of produce along O P. O a represents the daily minimum, and this is paid at the rate O r_1. So that a man who gets through only the amount O a receives in wage an amount represented by the rectangle O A, a man who does better than this, but still falls short of the standard, makes a quantity, say, O b, and is paid at O r_2 per piece, receiving a wage O B. The performance of a man who reaches the standard is shown at O c, and he is paid O C, plus a bonus O′ C″, or O C′ in all. The line A C′ shows how the piece-rate climbs as the product increases. But as it is no part of the scheme that a man should tear himself to pieces in pursuit of higher earnings, the piece-rate diminishes again after the standard is passed, as shown by the falling curve C′ D.

We have, then, first, to find out exactly how long it should take a man to do this particular job. This is done by what they call "elementary time study," not at all a good name, because what is meant is not by any means an elementary study, for it is the study of the time that should be taken

by each ultimate "element" or minutest portion of each particular job, such portions being very small, and the time for each being taken by a stop-watch. This enables a rate to be fixed accur-



A man who does Oa gets wages OA = 64 wage units
Ob OB = 121
Oc OC + OC' = 313
Od OC' + cD = 315 + x

Reckoning in Pennies - OA = 5/4
OB = 10/1
OC = 18/9 + 7/6 = 26/3

ately before the job is begun; and rates so fixed will never need to be cut. So that it is held that elementary time study is the key to the solution of the wages problem, and that the wages problem

once solved, the difficulty as to maximum production will solve itself.

But how to secure that this elementary time study shall have a chance to reveal the true minimum time in which a job can be done? This is only possible when the *methods of work* have been improved and systematized. Every detail in the running of the shop has been investigated and brought up to date, so that all equipment shall be of the best. And then the course of the work is planned out with the utmost care by "*routing*," so as to decide exactly *where* the work shall be done, and by "*scheduling*" to decide *when* it shall be done. Thus in each job neither time nor space is being lost. In some trades, such as those dealing with the cutting of metals, there are "Instruction Cards" issued to the men. These are made out in the Planning Department, giving the workman instructions as to the tool, the speed, the feed, etc., to be used.

But the method has been carried further than this. "*Motion study*" has been undertaken; and the exact "best way" of handling such work as shovelling and bricklaying has been investigated, the motions most economic of energy selected, and others eliminated, and proper periods of rest interspersed; the object of the investigation being to minimize muscular strain, and utilize energy to the utmost. As an instance of the improvement that this can effect, some pig-iron loaders thus raised their daily yield of work per man from $12\frac{1}{2}$ to $47\frac{1}{2}$ tons. But such a change cannot be brought about without *selection of workmen*, which is another feature of the system. Much organiza-

tion is also involved, giving rise to what is called "*Functional Management*," this being in fact a high development of division of labour, where the management in, e.g., a metal shop is divided out between no less than eight "bosses," four in the shop, and four in the planning room.

With various modifications the system thus described has been applied to about fifty-two industries in the United States up to 1915; and upon many other industries the system has exerted some influence, more or less indirect.

What can the system do? It all rests on an accurate study of unit times, leading to the setting of the proper task, so as to minimize friction and waste of energy. It is best fitted to undertakings of large size, where the jobs are similar and themselves of large size. Tools and equipment must be of the best, and standardized. Routing, scheduling, and dispatching, may by themselves increase productivity by 30 or 40 %. In cotton the results in America yielded an increase of 30 % in wages. The average quantity of pig iron handled per individual increased by 380 %. And so on for other results. Certain it is that there are many men glad to do more work for the extra 30 or more per cent. of wages; and the fact that the employers are willing to pay this extra wage shows that the men become, by reason of their increased productiveness, well worth the advance. But there is another side to this "speeding up" to which we will advert later.

Will the system solve the strike problem? Where does the Trade Union come in?

It is urged in favour of the system that harmony

has taken the place of antagonism, and that the surplus will become so great that wages, hours, and tasks being settled by science instead of by war, there will be no need to quarrel over the only remaining source of dispute, viz. the division of the profits.

So that it is held that Scientific Management will do for the workmen all the good that the Unions can do for them, and will prevent those Unions doing the greatest harm they can do, namely, by limiting the output. The argument resolves itself roughly into this -that the Scientific Management aims to solve the wages problem by producing *more*, and the Unions by producing *less*.

But organized Labour has without doubt increased in its opposition. Scientific Management will not, it seems, fully take the place of the Collective Bargain. It has still to stand inquiry on the following four main points (cf. the *Labour Year Book* for 1916, pp. 251 *et seq.*):

(1) Whether the rule in any given case is to result from natural law, or to depend on the employer's conception of fairness in the absence of the democratic safeguards of the worker.

(2) Whether the worker is to have his pride in his work increased by taking pride in the efficiency of the whole concern and by increased reward for increased output, or whether, by making him follow definite instruction cards, etc., it deprives him of thought, initiative, and joy in his work.

(3) Whether the task-setting is sufficiently sound and general to procure a better adaptation of the work to the individual, or whether it is simply a

form of speeding up, leading to over-work with all its evil consequences.

(4) Whether the traditional knowledge and skill of the worker, transferred to the management of the concern, will not increase the tendency to specialization in its extreme forms.

On some of these points the American experience seems to throw light. There have been many independent inquiries, but no evidence of over-work. The monotony of work seems to be lessened, on the whole. *Wages* have certainly been increased; and if the system greatly increases output, the workman's chief benefit will lie in *cheaper commodities*. But on the actual question of the division of profits it is doubtful whether the system will have anything to offer better than other systems. The great feature in its professed aims is *efficiency rather than strain*; and, directly or indirectly, there can be little doubt but that industry is moving on the whole, albeit slowly, on the way towards scientific management.

That there may still be left opportunities for difference of opinion is thus seen to be only too probable. How these differences may arise, and in some sense how they may possibly be met, we will try to discover in our next lecture. For the present, as we look back over the difficulties we have considered, and the remedies we have suggested, as being at least worthy of careful estimation, we find in most cases that it is not on statute or regulation that we fix the gaze of hope, but rather on a development of mind, and a wider outlook on the facts of our industrial life. To make at smaller sacrifice more things for the

greater satisfaction of ever-growing human wants must be recognized as at once the common object and the mutual interest of capital and labour. Employers must try to realize that every movement towards betterness for their employés is to their own ultimate interests as well. Labour must learn to feel itself honourably concerned in the success of the great complex of our industrial system, by elimination of all possible sources of waste, and by adoption of the best-known processes and the most efficient organization. And both sides must try to rid their minds of the most sterilizing of human fallacies—that each is poor who sees another richer, and that labour and capital are and must by nature be hostile.

LECTURE VIII

INDUSTRY AFTER THE WAR (*continued*)
OUR LIBERTIES

At the close of my last Lecture I pointed out that there might be, in the details of the scheme of Scientific Management which we were then engaged in considering, legitimate occasion for difference of opinion, and that these might give rise to serious dispute. And we were in this our last lecture to examine into the nature of these difficulties so that, if possible, remedies for them might be found in advance.

Looking again at the diagram on page 203, we see at once that one of the main sources of dispute will be as to the angle Q O C. It is not often that a dispute is capable of such clear graphical representation. In the diagram as drawn the angle Q O C is 45°, thus representing a wage-rate which increases at the same pace as the amount of the product. If the angle Q O C is $< 45°$ the wage-rate will increase more slowly than the product. If the angle Q O C is $> 45°$ the wage-rate will increase more rapidly than the product. Here then is the question which may have to be settled, and the method of whose settlement may present difficulties:—What amount of increase in the wage-rate is to correspond to a given increase of the efficiency of the labourer?

This question is certainly not the only one likely to arise, but it is amongst the most probable; and for its solution, as for that of others of various kinds, some machinery will have to be devised, if industrial peace is to be attained. Of what nature shall this machinery be?

Here we have at all events the comfort of knowing that much skilled and anxious consideration has been devoted to the evolution of a scheme or system which is hoped and intended to effect the purpose. This is the system outlined in the various Reports of the Ministry of Labour, and known as the Whitley Reports. The leading idea of these Reports is that consultative councils should be established, consisting of representatives of both employers and employed, whose discussions should lead to agreement upon questions which may have arisen, and may even by anticipating them prevent them from ever becoming acute.

According to the proposals of these Reports these councils would be formed on at least three, and possibly more than three, degrees of extensiveness of area. For each separate industry it is proposed to form, firstly, a Joint Standing Industrial Council, composed of representatives of employers and employed, and in extent national —as dealing with the industry throughout the whole country. When these National Industrial Councils are formed, they should proceed to create, or to consider the creation of, District Councils, representative of the Trade Unions and of the Employers' Association in the industry. The area of jurisdiction of these District Councils would of course be smaller than that of the National Indus-

trial Councils, but would be wider than that of the third of these proposed bodies, namely, the Works Committees, which would be representative of the management and the workers in particular works. In order to ensure sufficient adaptability to industries of different kinds, the word "works" would have to receive a wide interpretation; wide enough, in fact, to enable a particular coal-mine, or local association of coal-mines, to form its own "Works Committee," though such a body would probably be known as a "Pit Committee." It should be noted carefully that the view is expressed in the Whitley Report that "the respective functions of Works Committees, District Councils, and National Councils will require to be determined separately in accordance with the varying conditions of different industries" (First Whitley Report, Section 15). And undoubted wisdom and foresight are displayed by the Whitley Committee when the hopes and desires which have inspired their work are revealed in their statement: "The schemes recommended in this Report are intended not merely for the treatment of industrial problems when they have become acute, but also, and more especially, to prevent their becoming acute" (*ibid.*, Section 25).

These National Councils would either consider, or allocate to the Works Committees for consideration, the broader and deeper questions affecting the welfare of the particular industries with which each of them was concerned. And so far the scheme appears to be so well thought out, and to afford such favourable promise of success, that it is with hesitation that one ventures to suggest

that there seems to remain one element of narrowness which might bring difficulties in its results, and which a further development in the future might be able to obviate. The remaining danger seems to inhere in the contemplated division of our national industry as a whole into watertight compartments, each containing one industry alone. This seems almost to invite the risk of separate interests for separate trades, pursued by each to the detriment of all. Will not the highly developed organization of each trade tend towards a condition in which each plays for its own hand against the rest, with the result that the stronger Unions may victimize the weaker ones, until, with each separate organization aiming to realize advantages at the expense of the rest, we may be brought to a kind of universal internal protection, and fairness to each be only arrived at by the attainment of equal injustice to all?

The possibility of such a difficulty arising does not seem to have escaped the foresight of the Whitley Committee, for we read, in Section 20 of their original Report, as follows:

"20. It has been suggested that means must be devised to safeguard the interests of the community against possible action of an anti-social character on the part of the Councils. We have, however, here assumed that the Councils, in their work of promoting the interests of their own industries, will have regard for the national interest. If they fulfil their functions they will be the best builders of national prosperity. The State never parts with its inherent over-riding power, but such power may be least needed when least obtruded."

This is well said, and is no more than the patriotism of the workers of Britain during the war has fully deserved. It gives utterance, too, to that kind of faith in the people which so often tends to justify its existence by the mere fact of its existence. But might it not be possible to hasten and foster the better tendencies of such a constructive policy by adding another story to the design of the consultative edifice? Would it not be possible to construct, in addition to the Whitley Councils of and for the separate industries, a common, central, Senate of Labour, elected from the Members of the Whitley Councils, and like those Councils consisting of both employers and employed, and having concern with industrial questions, not for any particular trade, but if, and when, and to the extent that, such questions become matter of real national moment? The suggestion may be Utopian, though I trust that it is not; for to me it seems that in it lies the possible attainment of a real industrial Constitution, providing for deliberate and considered action, and enabling the most fundamentally important fact in all our industrial life, namely, the interaction of trade upon trade, to be duly weighed and considered in a Grand Industrial Council of the Whole Realm.

Another danger, of which I know many Trade Unionists to be keenly aware, lies in the unlimited voting power of very junior members of those Unions, who, with little real stake in the result, vote on the adventurous side. To a certain proportion of the young unmarried men in a large and prosperous Union, a fortnight on strike may well mean little more than a holiday on strike pay,

with football matches for trimmings. And the votes of such may overwhelm the wishes of older and long-established members, with many years' subscriptions paid up in the past, and families to maintain. Surely what is wanted here in the interests of the Unions themselves, is something of a Trade Union Proportional Representation Act, with a cumulative franchise, based on years of paying membership. By such an enactment we might hope to arrive at a more complete recognition *of* the Unions *by* the Unions. For one of the gravest dangers threatening the world of British industry has been the repudiation by the rank and file of the Unions of the terms accepted by their own leaders. If this tendency be prolonged nothing but disaster can ensue. The Unions must learn to take to heart the advice of Polonius:

> To thine own self be true,
> And it will follow as the night the day,
> Thou canst not then be false to any man.

But unhappily, there are not only schemes abroad for organizing particular trades, but plenty also for disorganizing trade in general.

I have already pointed out how the promise of Colonial Preference without taxation of food throws over the last vestige of Mr. Joseph Chamberlain, the great Protagonist of Tariff Reform. But we have already a tax on food in the shape of the farmers' sixty-shilling guarantee. You are here faced by a great economic law, the Law of Indifference, which tells us—One market, one price. Of course I shall be reminded that all economic laws are out of date, and have ceased to count with

the Government. I reply that Governments do not count with economic laws; and that however much Governments may "blank the consequences," the said consequences will inevitably be there to be blanked. And those consequences in this case will be that if the foreign producer brings wheat here which he can sell at 30s. the quarter, while you are paying the English farmer 60s. under the guarantee, you will have to sell the whole supply at one and the same price. But what that price will be will depend on how the guarantee is administered. There are various possible ways, of which some are worse than others.

METHOD I. *By exclusively fiscal arrangement.*

Suppose that England wants 30 million quarters in all to eat, of which the foreign producer brings us 20 million for which his price, c.i.f. at an English port of discharge, is 30s. the quarter. If, then, the importer brings it into bond at 30s., he pays 30s. tax on taking it out of bond, and sells at 60s., the guaranteed price. We should then stand thus:

	£
20 Million Quarters Foreign—	
Production price	30,000,000
Tax	30,000,000
	60,000,000
10 Million Quarters British (guarantee) ..	30,000,000
30 Million Quarters to eat for	£90,000,000

Or, 60s. the Quarter all round.

But such a plan will doubtless be recognized

as too bad for endurance, and instead we may have :

METHOD II. *Government as sole Purchaser.*

Let the Government now undertake to buy and sell the whole of our wheat supply, taking all the British farmer produces at 60s., and the remainder as imported at 30s. We shall then have it thus :

	£
20 Million Quarters Foreign (*a* 30s	30,000,000
10 Million Quarters (*a* 60s (guarantee)	30,000,000
30 Million Quarters to eat for	£60,000,000
Or, 40s the Quarter	

But the idea is to educe more British wheat. If the plan succeeds in doing so, we may have :

	£
10 Million Quarters Foreign (*a* 30s	15,000,000
20 Million Quarters British (guarantee)	60,000,000
30 Million Quarters to eat for	£75,000,000
Or 50s the Quarter.	

So that the more successful your experiment is, the dearer your bread becomes. In the almost inconceivable case of *complete* success, we should have *all* our wheat home-grown at 60s. the quarter, or at a total expense of £90,000,000. Now the most sanguine estimate, so far as I have seen, is that the guarantee would induce a British production of 75% of the required total, leaving us still "dependent on the foreigner" for the remaining 25%. And if our success in the recent war is after all to be so limited as to falsify Mr. Lloyd

George's declaration that "there must be no next time," and a next war nevertheless comes upon us, in the course of which the U-boats of the future absolutely cut us off from this 25%, it is hard to estimate how high the price of wheat might go. For the foreigner would have got out of the habit of growing corn for the English market, and our 25% shortage could find no relief in importation, even if the risk of sinkings were faced with all the wonderful and proven heroism of our Merchant Service. The so-called Gregory King's Law[1] would make it come out at about 60s. +90s. =150s. the quarter; and if so, this would be even worse than the 126s. 6d. of 1812. And if to all this we add the incidental expenses of Revenue Officers, Agency, Storage, Expert Inspectors, Clerical Assistants, etc., he would be a bold man who would predict the limits to which the price might finally run. But without attaching too strict an arithmetical interpretation to the conditions of such a problem, it is sometimes as well to devote a little passing consideration to the manners and customs of those territories where angels fear to tread.

And the sad thing about it is that, once started, the chances are that it will never stop. I fear

[1] Gregory King (1648–1712) worked out a calculation, often called "Gregory King's Law," by which a deficiency in the supply of wheat would raise the price in the following proportions. –

Defect		Above the common rate.
1 tenth		3 tenths
2 tenths		8 tenths
3 tenths	raises the price by	16 tenths
4 tenths		28 tenths
5 tenths		45 tenths

that the idea that the bounty on our corn is to cease at the end of five years is a fond illusion. The guarantee has ploughed up permanent pasture and started an investment of capital in a kind of undertaking which, by the very terms of the pleas urged for its own existence, must fail unless bounty-fed. And arable cannot be turned back to pasture at a fortnight's notice. Unless I am much mistaken, as indeed I shall be only too glad to be shown to be, the proposal to terminate the guarantee arrangement at the end of the five years will be met with indignant remonstrance, and a plaintive cry that we are compassing the ruin of half the farmers in the land; and the change will be difficult, almost to the extent of impossibility, to carry through. Adam Smith's mournful prophecy at the close of the second chapter of his Fourth Book that mighty chapter which at last unbarred the gates of monopoly and let in the people's food—will again apply, and this time without the awful force of famine which was to bring about its falsification.

> "To expect, indeed, that the freedom of trade should ever be entirely restored in Great Britain, is as absurd as to expect that an Oceana or Utopia should ever be established in it. Not only the prejudices of the public, but what is much more unconquerable, the private interests of many individuals, irresistibly oppose it."

Smith's prophecy now stands again; where is the force that shall contradict it?

Nor is this really the right way to assist the

British farmer. He should be helped by a more scientific education in agriculture, and by a thorough overhauling of our system of land tenure. Better cottages and more of them would go far to solve one of the farmer's greatest difficulties, the supply of agricultural labour. The Agricultural Sub-Committee of the Reconstruction Committee has pointed out that there is little hope of a real development of agriculture as long as the demand for cottages remains unsatisfied.

And indeed we shall be fortunate if these measures do not result in the setting up in England of a homologue of that "Agrarian Class" whose existence has been so baneful in Germany. Nor is any form of bread tax without an injustice peculiarly its own. Those whom I am addressing here have all had some bread *with* their dinner. But in England there are still, and soon there may be more, who have had bread *for* their dinner; and the alteration of the little preposition marks a mighty difference. The bread bill of the poor labourer is not merely relatively, but actually, heavier than the bread bill of the rich; so that the taxation of bread carries a double injustice. And when I find myself taken to task by "advanced" thinkers, who deride me for "chewing the remainder biscuit of obsolete theories," I reply that justice is never obsolete, nor is there safety in its disregard.

We shall have to get back to our peace standard of production, and spread our goods again over the *whole* world, before we can even *begin* to pay our enormous debt. Far beyond that standard we must go before the payment can be *completed*. And there is no payment save in goods: and

quantity of goods depends on our efficiency. And I claim the right to use strength of hand and dexterity of brain to the best account. My efficiency is the most precious portion of my freeman's inheritance. I submit that the product of that efficiency is my own; I have a right to exchange it with whomsoever I please. For human progress rests on exchange: to limit exchange is to limit civilization, and *pro tanto* to enslave mankind. For it dooms mankind to greater exertion for smaller satisfaction. It is a resultless *corvée*; stupid as well as wicked; a usurpation beyond the authority of any government. Civilization has denied the right of ownership in human beings, and has declared the slave-owner's title bad.

And here we pass from being economists only, to the purview of the citizen. I have ever maintained, none more strenuously, the independence of economic science. While investigating an economic problem we must be open to economic considerations alone, or our investigation will be confused, and our conclusion worthless. But no man should be, or even can be, only an economist. The problems of the higher expediency, of right and wrong, await the economist as they await us all, in the field of ethics. The economist must pass, even as must all other men, to Life's great warfare which awaits him there; and if for that warfare we would be prepared, our young must dream dreams of an inspiring future, and our old see visions of a guiding past. Let us humbly trust that, passing so, we may come to tread that other field, armed with a keener insight, and shielded with a wider wisdom.

And if to some small extent I have aided any to that end, then, like the plowman of old, I may stall my oxen well content, for my little furrow has been driven straight.

My task is done; and for the manner of its doing there is no judge more stern and more relentless than myself. Others in wider fields must carry on the work; for them to resolve that this vast world-struggle which has so victoriously enlarged the liberties of Europe shall not contract the freedom of our own loved land. Theirs to maintain that free and fearless interchange of mutual advantages which constitutes the honest trade wherein gain of each is gain of all, and for wealth of one is none the poorer. And I close my task, sensible of the honour done me in committing it to me, but above all in the fervent hope that, now that the Spirit of Peace is hovering near, and her message is being carried on the wings of all the winds far over the sounding sea, hand in hand she may bring with her the sister Spirit of Freedom, wooed back from her present refuge somewhere beyond the clouds; freedom of thought, freedom of speech, freedom of life, freedom of trade, that side by side for evermore they may dwell together, benign and beautiful, by the hearths of the children of men.

INDEX

ACCEPTING HOUSES, 61
ACCEPTOR OF A BILL, 59
ACCOMMODATION BILLS, 59; how resembling and how differing from Real bills, 60
ADVANTAGE OF INTERNATIONAL TRADE, 47
Allen v. Flood, 195
ANALYSIS OF THREE THOUSAND MILLIONS, 5
APPLES, old tax on, 140
ASSIGNATS, 178

BALFOUR, LORD, his committee, 142
BANK NOTES, convertible and inconvertible, 64
BARKER, MR. ELLIS, in *Nineteenth Century*, 197
BARTER, inland, restored by Clearing House, 69; in international trade restored by Bills, 71; in distant trade by power of English Bill, 87
BELL, SIR HUGH, on Key Industries, 150
BILL BROKERS, function of, 72
BILL, ENGLISH, central credit document of the World, 88, 128
BILL OF EXCHANGE defined, 56; form of, 57; nationality of, 72; service to commerce rendered by, 73
"BLIND ALLEY" occupations, 187
BÖHM-BAWERK, PROFESSOR, 68
BOLTON IN 1840, 117
"BUY BLANK'S MATCHES AND SUPPORT BRITISH INDUSTRY," 113

"CA' CANNY," 184
CANADA AND ENGLAND, 24
CANALS, 185
CAPITAL, what, 13; a levy on, 163
CAPTURING GERMAN TRADE, 105
CASH NOTE, early name for cheque, 64
CHALMERS, DR., Theory as to Loans, 162
CHAMBERLAIN, MR. JOSEPH, 142, 214
CHEAPNESS, real, what, 50
CHEQUE defined, 64
CIVILIZATION defined, 10; diminished by obstacles to free exchange, 48
CLEARING HOUSE, BANKERS', 66; restores inland barter, 69; London the international Clearing House, 85
COAL under Kent, 98
COLONIAL PREFERENCE, 89, 142
COMMITTEE ON COMMERCIAL AND INDUSTRIAL POLICY, 142
CONSTITUTION, a real Industrial, 213
CO-OPERATION, 14
COPYRIGHT, 132
COST OF CARRIAGE A NATURAL PROTECTION, 98
COTTAGES, more, necessary to improve agriculture, 219
COURCELLE-SENEUIL, 10
CRAFT MONOPOLY, 199
CREDIT defined, 56; four forms in which expressed, 56; metallic basis of, 68
CUNLIFFE, LORD, Committee on Currency, 177
CURRENCY, during and after war, 174 sq.; efficiency of, 175; committee on, 177

DAYS OF GRACE, 57
DEFENCE OF THE REALM ACT, 102
DEMAND AND SUPPLY, how related, 48

DEVELOPMENT by differentiation, 12
DILUTION OF LABOUR 186, 199
DIMINISHING RETURN, Law of, 20
DIMINISHING UTILITY, Law of, 29
DISCOUNT AND PREMIUM ON BILLS 77
DISCOUNTING A BILL 72
DISTRICT COUNCILS, 210
DIVISION OF LABOUR 14 drawbacks of 17
DRAWER AND DRAWEE of a bill 59
DUMPING, 101 136 142 144
DYES, capturing German trade in, 151

ECONOMIC PRESSURE limits of 156
ECONOMICS defined 10
EFFICIENCY OF CURRENCY 175
ELEMENTARY TIME STUDY 202
ELLIOTT, EBENEZER 117
ENGLAND AND CANADA 24
ENGLAND, economically an old island 49 her debt 160
EXCESS of British Imports over Exports, 115
EXCHANGES, Foreign defined 71 function of Bill Brokers in the 71 at specie point 77 between specie point 78 *Land to Pay*, 79, Effect of Foreign Loan on 82 meaning of Favourable exchange, 82
EXPORTS, foreign and colonial compared 143

FACTORS OF PRODUCTION 13
FAIRY TALE of the Fifty Daughters, 95
FINANCE BILLS supported by Bank of England 63
FOCH, GENERAL, 8
FOREIGN COMPETITION reasons for success of, 103
FOREIGNER, the, Purchase from is purchase by, 49
FOREIGN TRADE, not always an index of prosperity, 49
FOR VALUE RECEIVED, 57
FREE TRADE AND UNEMPLOYMENT, 110, Diagram of, 112

GENERAL TARIFF, 139
GERMAN GOODS, exclusion of, 142, is to refuse all indemnity, 152
GERMANY, how to be made to pay an indemnity, 92
GLASSWARE, protection of, 138
GOMPERS, MR, on Restriction of Production 196
GOVERNMENT pledged to an impossibility 180
GRAND INDUSTRIAL COUNCIL, scheme for a, 213
GREY VISCOUNT, on League of Nations 155
GROPI on the army of Xerxes, 8
GUIZOT on Bastiat in 1840 117

HOOD TOM 117 166
HUGHES, MR 2

IMPORTS, excess over Exports 115
INCHCAPE, LORD on shipping, 185
INCOME TAX, three years' average 171
INCREASING RETURN Law of 18
INDIFFERENCE Law of 214
INDUSTRIAL REVOLUTION, 35
INTERCONVERTIBILITY OF INDUSTRIES 16
INTERNATIONAL TRADE 35 exact advantage of 47 splitting the difference 96
INVERSE QUANTITY Law of, 175

KAISER'S powers limited, 3
KENTISH COAL 98
KEY INDUSTRIES 142, 150
KING GREGORY his Law, 217

LABOUR defined 13
LAND 13
LAWS Economic stated —Increasing Return 18 Diminishing Return 20 Diminishing Utility 29 of Inverse Quantity of Money 175 of indifference 214 Gregory King's, 217
LEAGUE OF NATIONS 154 sq
LEATHER, both excluded and admitted, 119
LEAVE to earn a living, 194
LEEDS, stone heap at, in 1842, 100
LIVERHULME, LORD, 131

LOAN, Foreign, effect on exchanges, 82; negotiation of, 83; of what a loan consists, 85; loans *versus* taxes, 161
LONDON, the Clearing House of the World, 86

MACHINERY, 186
"MADE IN GERMANY," 133
MARKS, Trade and Merchandise, 132
MERCHANDISE MARKS ACT, 103
MINT PAR, calculation of, 75
MONEY defined, 54; its four functions, 55; credit dispensing with money, 56, Law of Value for (Law of Inverse Quantity), 175
MOTION STUDY, 204
MUMMY, import of, 141

NATION, economic definition of, 36
NATIONAL INDEPENDENCE, 119
NATIONAL INDUSTRIAL COUNCILS, 210
NATURE'S TEACHING, 2; her economic injunction, 53; the Nature-toll, 94
NETWORK OF TRADE UNION SYSTEM, 181
NO BUYING WITHOUT SELLING, 113

PAPER, 15 per cent on, 120, 136
"PAR" OF EXCHANGE, 74; Mint par calculated, 75
PARIS, Economic Conference held at, 124–9
PATENTS, 132
"PAY AND PROCEED" as law of bills, 58
PIECE RATES, cutting of, 201
PIVOTAL INDUSTRIES, 150
PLATE AND PLATED WARE, 15 per cent. on, 137
PORT SUNLIGHT, 131
POTTERY, SCHOOL OF, at Stoke-on-Trent, 131
PRACTICAL MAN, the, 99
PREMIUM AND DISCOUNT ON BILLS, 77
PRODUCTION, meaning of, 9; the only means of payment, 50, 89; and of loans, 85; the way to reduce debt, 171
PRODUCTIVENESS, Nature's demand for men, 101
PROFIT-SHARING, 201
PROGRESS defined, 10; as diminution of the Nature-toll, 95
PROMISSORY NOTE defined, 64
PROPORTIONAL REPRESENTATION in Trade Unions, 214
PROSPERITY not a positive argument, 116
PROTECTION only a limited aid, 118; and associated industries, 118; "of all fair to all," 120; Poor-Law or Piracy, 139
"PROTECTIVE TAX," fundamental fallacy of, 107, 134
PURCHASE from, is purchase by, the foreigner, 49

QUASI-RENT, 169

RAILWAYS, 185
RATE OF EXCHANGE defined, 74
REAL BILLS, 59; how resembling and how differing from accommodation bills, 60
REIMS CATHEDRAL, 3
REPUDIATION of debt, 162
REQUISITES OF PRODUCTION, 13
RESEARCH, State aided, 129
RESTRICTIONS OF TRADE, the Economist's report on, 51, effect on wages, 183

SCIENTIFIC MANAGEMENT, 196, 199 sq; and organized Labour, 206; where dispute may arise, 209
SCIENTIFIC RESEARCH, State-aided, 129
SCOTT, PROFESSOR, 4
SENATE OF LABOUR, 213
SIXTY SHILLING GUARANTEE, 143, 214 sq.
SKILL, waste of, 198; true dignity of, 199
SMITH, ADAM, on Division of Labour, 15; on Real Price, 50, 93; on Free Trade, 97;

the Poor Man's Patrimony, 121; Gunpowder and Sail-cloth, 135; Prophecy on Free Trade, 218
SPECIE POINTS, 77
STEEL'S TABLES, 140
STOKE SCHOOL OF POTTERY, 131
STONE, ages of, 11
SUB-COMMITTEE OF ADVISORY COMMITTEE OF THE BOARD OF TRADE, 124, 129 sq.
SUNLIGHT, PORT, 131
SUPPLY AND DEMAND, how related, 48
SWIFT, DEAN, on Arithmetic of the Customs, 169

TARIFF, General, 139
TASK demarcation, 199
TAXATION in the coming years, 168
TAXING THE FOREIGNER, 108
TAYLOR, F W, on Restriction of Output, 197
"TENDENCY" IN ECONOMICS, meaning of, 79
TENNIS-BALLS, old tax on, 140
THEORY AND PRACTICE, 106
TOYS, protection of, 137
TRADE UNION REGULATIONS, abandonment and renewal, 180 sq
TWENTY YEARS OF PROGRESS (Table), 109
TURBOTS 'AS LOBSTERS," 141
TYRE-ROLLING MACHINERY, 197

UBIQUITY of the English export, results of, 87
UNIVERSITY OF LONDON, Degrees opened to Women, 191
UTILITIES, of different rank, 29
UTILITY, Law of Diminishing, 29; Final and Marginal, 31 and note; increased by exchange, 33

WALLACE, DR A R, 6
WAR AN ECONOMIC LOSS, 49
WAR INDEMNITY, paid by Products, 89; method of payment of, 90; not "dumped," 91
WEALTH defined, 10; and well-being, distinction between, 96
WEBB, MR SIDNEY, 167, 181, 188, 194, 196
WHATELEY, ARCHBISHOP, 100
WHITLEY REPORTS, 210
WILSON, PRESIDENT, 127
WITHERS, MR HARTLEY, 63
WOMAN QUESTION, The War and the, 189
WONDERFUL CENTURY, 6
WORKS COMMITTEES, 211

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